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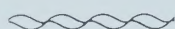
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Achievement in Individualized and Conventional Chemistry Courses and its Interactions with Selected Academic and Personality Variables

The experiment compared the achievement of two groups of students enrolled in a one semester introductory chemistry course. The experimental group was treated by individualized study whereas the control group received a normal teacher directed presentation. An attempt was made to identify student characteristics which might lead to greater achievement for an individualized treatment. Analysis was by multiple linear regression, incorporating the use of several covariates. In spite of large gains for the experimental group in unadjusted means, the treatment main effect was marginally nonsignificant after adjustment for the covariates. No interaction was observed between treatment and general ability, mathematical ability, or the personality trait extraversion-introversion. There was a strong suggestion that those students with a tendency towards neuroticism benefited from the experimental treatment. Mr. Griffiths is Associate Professor of Education and Dr. Crocker is Director of the Institute for Educational Research and Development at Memorial University.)

The last few years have seen a resurgence of interest in the provision of instructional patterns which attempt to cater more to individual differences among students at all levels. The resultant literature has been pervasive and persuasive. The Keller plan has seen widespread application, particularly in psychology but also in the sciences (Sherman, 1974). In science education several other informative long term studies have been described (Postlethwaite, 1969; DeRose, 1970; Becht, 1973). Yet it appears that much of the literature may be as misleading as it is appealing. It is legitimate to attempt to determine the success, both affective and cognitive, of an experimental treatment relative to that which it may replace. It is certainly

appropriate to describe such findings so that they may be related to the general field. However, three features of the literature in this case are disturbing.

First, the vast majority of reports are anecdotal, subjective, or lacking in statistical rigour or experimental design. Second, this is compounded by the lack of a common, useful operational definition of individualized instruction, weakening the generalizability of conclusions. Paradoxically, greater precision would appear to be incongruent with the ideal of individualization. Finally, very few attempts have been made to identify student characteristics which may interact with particular variants of individualized instruction. The investigation of such trait-treatment interactions has recently come to be recognized as potentially the most significant aspect of experimental studies in instruction.

This study attempts to accommodate these problems. Self pacing, using mainly written materials, was the variant of individualized instruction used. An attempt was made to determine the overall success of the treatment, relative to a control, and to incorporate sound experimental and statistical control. However, on the assumption that in the hands of some teachers, some students will attain more in some parts of the curriculum when it is individualized, the major concern was to identify interactions between selected student characteristics and achievement. There are some indications that personality may be one such factor (Bigelow, 1968; Szabo & Feldhusen, 1971).

Hypotheses

The first hypothesis under investigation was that the individualized treatment (i.e., mainly self pacing) would yield higher mean scores on the criterion measures than would the control treatment. The second hypothesis related to the possibility that variables other than treatment would influence performance hence producing interactions between these variables and treatment. The variables investigated for possible interactions were general ability, mathematical ability, whether or not the subjects had studied chemistry in high school, and the two personality factors extraversion-introversion and neuroticism-stability as measured by the Eysenck Personality Inventory. (Eysenck & Eysenck, 1963). The following null hypotheses were therefore tested:

- Hypothesis 1: There will be no significant differences between experimental and control groups in mean scores on criterion examinations.
- Hypothesis 2: There will be no significant interaction between treatments and the following variables:
- 2.1 previous chemistry
 - 2.2 general ability
 - 2.3 mathematical ability
 - 2.4 extraversion
 - 2.5 neuroticism

Procedures

The experiment involved students enrolled in a first year course at Memorial University of Newfoundland. Despite the university setting, first year classes at Memorial greatly resemble those in the last year of high

school elsewhere. The first year faculty are generally former school-teachers, class size and course content are typical of most senior high schools, and the students enter after completion of grade eleven. Moreover the particular course chosen for study was based on the first six chapters of the most recent version of Chem Study (Parry, et al., 1970) and catered to students who had either no previous chemistry or a weak background in the subject. Students with a high grade eleven average were exempted. The nature of the course is that of a non-credit introductory course, and hence it is called a "Foundation" course. Hence the sample might best be considered to represent a population consisting of average students enrolled in a high school chemistry course. The sample consisted of an experimental class ($N = 30$) and a control class ($N = 31$) drawn randomly from the approximately two hundred registrants for the course.

Criterion measures consisted of a one-hour examination taken after eight weeks and a two-hour final examination taken at the end of the twelve week course. Each included multiple choice and free response questions, and was approved for content and construct validity by all five instructors teaching the course. The only other instrument administered during the study was the Eysenck Personality Inventory which contains 57 yes-no items and was administered several weeks after the beginning of the course. Grade eleven average score over seven subjects was taken as a measure of general ability. Grade eleven algebra score was used as a measure of mathematical ability.

The control group was treated entirely by normal large group lecture presentation, and the instructor was available for consultation if required. For the experimental group a major printed learning guide was developed to accompany the text, in lieu of teacher presentation. Members of this group were required to attend the classroom or the adjacent resource room during scheduled class times, but were encouraged to work individually or in small groups as they desired, and to proceed at their own pace. The instructor was available at this time and was generally involved in individual or small group consultations. He was also available at other times upon request. Each group used the same classroom, had the use of a small resource room containing audiovisual and printed aids, and performed the same laboratory activities. Any member of the experimental group was able to take a chapter test at any time, upon request. At least three distinct, but equivalent, tests were available for each chapter. Progress to the next chapter was possible only after consultation with the instructor, and remedial work was suggested for those objectives which had been missed. The members of the experimental group were encouraged to progress through the course as quickly as they wished and to take the examinations ahead of the control class if they wished. As will be discussed later, the latter part of this option was not taken.

Results

Table 1 shows the overall means and standard deviations of the variables. Table 2 gives the intercorrelations among the various continuous variables. The relatively high correlation of grade eleven algebra and grade eleven average with the criterion measures would suggest that these

TABLE 1
MEANS AND STANDARD DEVIATIONS OF VARIABLES (N = 60)

Variable	Maximum	Experimental		Control	
		Mean	S.D.	Mean	S.D.
Grade XI Average	100	68.7	4.9	67.4	4.2
Grade XI Algebra	100	67.0	6.8	67.7	11.2
Mid-Semester	100	69.1	14.9	59.5	17.4
Final Exam	100	56.0	14.0	51.7	15.5
Extraversion	24	14.5	3.6	14.1	3.4
Neuroticism	24	12.3	4.6	14.4	4.4

TABLE 2
INTERCORRELATIONS AMONG ALL CONTINUOUS VARIABLES FOR
COMBINED GROUPS (N = 60)

Grade XI Average	1.00	.51**	.43**	.37**	-.04	.01
Grade XI Algebra		1.00	.39**	.34**	-.09	.04
Mid-Semester			1.00	.70**	-.13	-.12
Final Exam				1.00	-.09	-.13
Extraversion					1.00	-.02
Neuroticism						1.00

* Significant at .05 level.

** Significant at .01 level

variables might exert a significant influence in a regression equation designed to predict criterion scores. On the other hand, there is little to suggest that either of the personality variables would, in themselves, contribute to a regression equation. The essentially zero correlation between the two personality variables is consistent with previous findings concerning the orthogonality of the two scales (Eysenck & Eysenck, 1963). Finally, the high correlation between the mid-semester and final examinations can be interpreted as evidence of the reliability of these measures.

Each hypothesis was tested by developing and comparing appropriate multiple linear regression models using, in turn, mid-semester and final examinations as criterion variables. Successive pairs of regression equations were compared, using the *F* ratio, in order to examine the effect of treatment and of the various possible interactions. In each regression model, grade eleven average, grade eleven algebra, and previous chemistry were used as covariates whenever they were not directly under test. The analysis was thus equivalent to a series of two way analyses of covariance using treatment as one factor, each of the variables listed in hypothesis 2, in turn, as the second factor, and the remaining variables as covariates in each case.

The regression analysis summaries are shown in Tables 3 and 4. In the regression analysis, hypothesis 1 was, in effect, tested simultaneously with each of the sections of hypothesis 2. Except for differences in the values of

R^2 , due to missing data, the use of different covariates and the importance of the interactions, the treatment effect was the same in all cases. It is noted that the design used also permitted tests for the main effects of previous chemistry, general ability, mathematical ability, extraversion and neuroticism. Although none of the research hypotheses related to these effects, some of these results are indirectly of interest.

TABLE 3
SUMMARY OF REGRESSION ANALYSIS, MID-SEMESTER

Restriction on Model	R^2	df	ΔR^2	F	p
None	.355				
Treatment-Chemistry Interaction	.348	1/55	.007	.633	-
Treatment	.317	1/55	.031	2.63	.111
Previous Chemistry	.267	1/55	.081	6.78	.011
None	.365				
Treatment-General Ability Interaction	.352	2/51	.031	0.541	-
Treatment	.301	1/53	.064	4.14	.047
General Ability	.272	2/53	.080	3.25	.047
None	.394				
Treatment-Math Interaction	.363	2/51	.031	1.30	.281
Treatment	.333	1/53	.030	2.48	.121
Math Ability	.333	2/53	.030	2.48	.292
None	.502				
Treatment-Extraversion Interaction	.490	2/32	.012	.389	-
Extraversion	.399	2/34	.091	3.02	.062
None	.509				
Treatment-Neuroticism Interaction	.433	2/32	.076	2.49	.099
Neuroticism	.407	2/34	.026	.789	-

In spite of apparently wide differences in means between the experimental and control groups, especially on the mid-semester exam, null hypothesis 1 was not rejected. Similarly it should be noted that, with the exception of marginally nonsignificant interactions between treatment and previous chemistry for the final examination, and between treatment and neuroticism for both criterion measures, the null hypothesis could not be rejected for the various interaction effects. In the latter case, however, the consistency of the results over the two criterion measures suggests that the probability of the result being due to chance is, in fact, substantially less than that indicated by the separate probabilities. As for the main effects of the blocking variables, the results show, for the mid-semester exam, that previous chemistry and general ability exerted a significant effect on performance. Although the trait extraversion-introversion also appeared to affect performance, the result was not stable over a replication of the analysis with a second sample, and must therefore be treated with skepticism.

TABLE 4
SUMMARY OF REGRESSION ANALYSIS, FINAL EXAMINATION

Restriction on Model	R ²	df	ΔR^2	F	p
None	.270				
Treatment-Chemistry Interaction	.219	1/54	.051	3.78	.057
Treatment	.216	1/55	.003	.197	-
Previous Chemistry	.173	1/55	.046	3.28	.075
None	.228				
Treatment-General Ability Interaction	.206	2/51	.022	.746	-
Treatment	.196	1/53	.032	.648	-
General Ability	.158	2/53	.048	1.58	.215
None	.279				
Treatment-Math Interaction	.267	2/51	.012	.438	-
Treatment	.265	1/53	.014	.117	-
Math Ability	.206	2/53	.061	2.19	.121
None	.494				
Treatment-Extraversion Interaction	.482	2/32	.012	.370	-
Extraversion	.430	2/34	.052	1.72	.193
None	.328				
Treatment-Neuroticism Interaction	.233	2/32	.095	2.26	.121
Neuroticism	.216	2/34	.017	0.381	-

The relatively large standard deviations for the mid-semester and final examinations suggest that quite large between-group differences could be statistically nonsignificant because of the wide within-group variation. It was therefore decided that a graphical analysis of some of the marginally nonsignificant results might be valuable, especially in suggesting areas for further study. Figures 1 and 2 show the interaction between treatment and neuroticism and between treatment and previous chemistry. It is stressed

FIGURE 1
TREATMENT-PREVIOUS CHEMISTRY INTERACTION

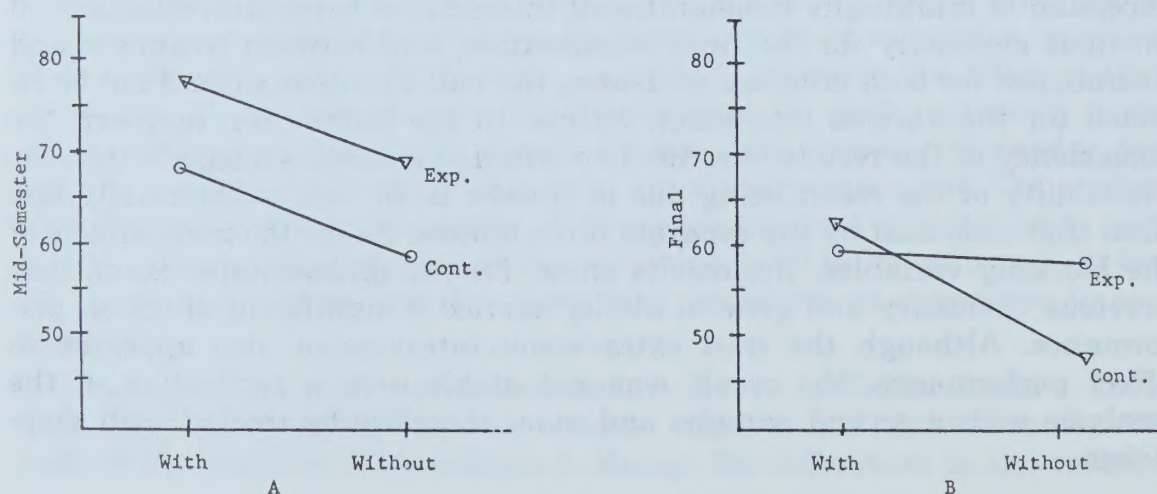
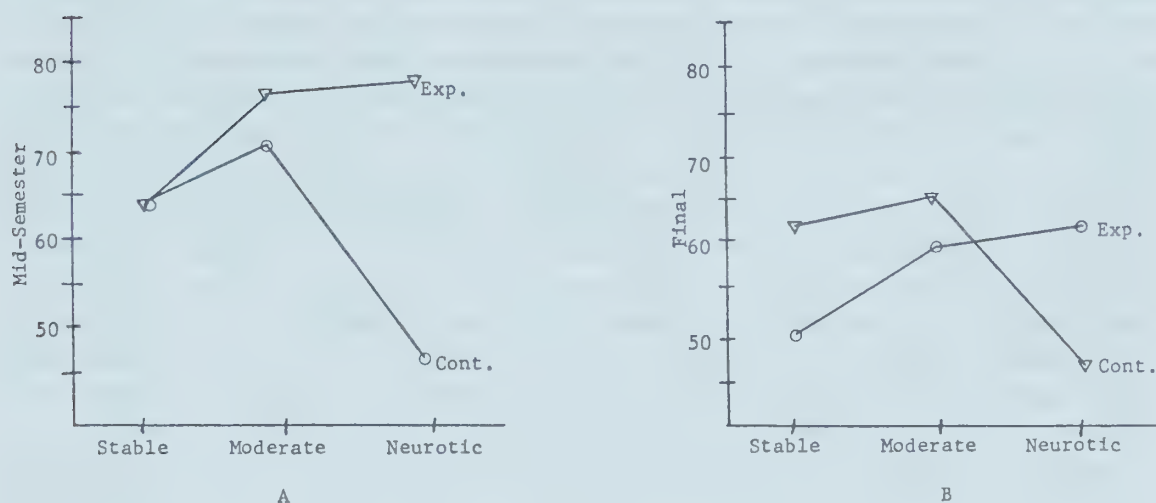


FIGURE 2
TREATMENT-NEUROTICISM INTERACTION



that the interactions illustrated must be interpreted in the context of the regression analysis rather than by visual inspection alone.

Discussion

In terms of statistical significance the experimental treatment could not be claimed to be more beneficial than the control. As has been indicated, this may have been influenced by the abnormally large within group variances. Furthermore, after allowing for the observed interaction between previous chemistry and the experimental treatment, it appears that consistent gains approaching marginal significance might be claimed for those students without previous chemistry. This, of course, would be the case in most high schools using Chem Study. It might also be argued that the previous education of the students had not required substantial self-direction, and that consequent reactive effects may have influenced performance.

The attempt to identify interactions between selected factors and treatment was unsuccessful, with the possible exception of previous exposure to the subject and also neuroticism. The significant interaction between previous chemistry and treatment evidenced in the final examination is difficult to explain especially in the direction shown. Those students in the experimental group who had previous chemistry suffered a substantial relative decrease in attainment from mid-semester to final examination. One plausible explanation may lie in a change of attitude. Until a few weeks before the mid-semester examination it was apparent that these students were progressing at a much faster pace than most other students. Initially they hoped to finish the course well before the end of the semester, progress immediately to the next course, and by the end of the year regain the semester they felt they had lost by having to enrol in the Foundation course. When it became apparent that this was unlikely to succeed their work rate dropped rapidly and general attitude to the experimental treatment changed adversely. It seems very possible that this was the cause of the observed interaction.

In analysing for personality-treatment interaction it was necessary to

make several random selections, to ensure reasonably equivalent cells. The regression analysis indicated interaction between neuroticism and treatment to be marginally nonsignificant. However, the actual differences in favour of those who were high on the neuroticism scale and in the experimental group are so great as to at least suggest a profitable avenue for further research. This contention is strengthened by the consistency of the result over the two examinations. Several studies have indicated that introverts achieve more highly than extroverts, although this may be related to age (Lynn & Gordon, 1961; Amaria, Biran, & Leith, 1969). The present study was more concerned with possible interaction between trait and treatment. No interaction was observed. Further, although it might be inferred from Table 4 that the effect on achievement of the total sample was only marginally nonsignificant, a replication indicated no significant difference, although any differences consistently favoured introverts.

Neither general ability nor mathematical ability interacted significantly with treatment. It should be noted that although the range of mathematical ability was wide, the range of general ability was restricted to the lower end of the university intake. Hence the results cannot be claimed to indicate that achievement in an individualized course is necessarily unrelated to ability. Conversely the results do indicate that average students are not mitigated against by an individualized treatment.

General impressions and student comments agreed with those from other studies. The provision of fairly precise behavioral objectives was favoured. Weaker students tended to fall too far behind, unless provided with deadlines. The better students were concerned that a sequential course should be immediately available so that they could benefit from adhering to a fast pace. Hence there appeared to be a general need for an extrinsic course of motivation. As well as the advantages generally claimed for individualized instruction, others may be more specific to science. For the student who missed time or who cannot keep up or who fails to grasp an important concept, the hierarchial nature of most science courses may result in appreciable cumulative loss. Such problems are less likely in an individualized program, even if that program only allows for differential pacing. Secondly, the conceptual nature of most of the new curricula may be quite inappropriate for those not wishing to specialize in science. Individualization enables greater flexibility and allows for different interests and abilities. Nevertheless, even if highly positive gains were reported, the caution to make sure you plan your approach carefully before you jump on the individualized instruction bandwagon should be well taken. In particular it is likely that students will either expend more time on an individualized course, to the possible detriment of other courses, or will need to extend the time taken to complete the individualized course. The actual cost of producing materials may be prohibitive, especially if a heavy media emphasis is involved. In the present study extra cost was minimal. It is also likely that teachers involved will encounter increased workloads, except perhaps in large scale programs. Possibly teachers and students alike will be compensated by greater success and satisfaction, if in fact these may be assured. Perhaps the greatest contribution will come from individualized excursions from a basic core, both for able and weaker students. Our final word, then, is one of hope tempered with caution.

References

- Amaria, R. P., Biran, L. A., & Leith, G. O. M. Individual versus co-operative learning. *Educational Research*, 1969, 11, 95-103.
- Becht, P. A. Individualized chemistry—A program designed to personalize instruction in chemistry. Research Monograph No. 4, P. K. Yonge Laboratory School, Gainesville, Florida, January, 1973.
- Bigelow, G. S., & Egbert, R. L. Personality factors and independent study, *The Journal of Educational Research*, 1968, 63, 37-39.
- DeRose, J. V. Independent study in high school chemistry. *Journal of Chemical Education*, 1970, 47, 553-560.
- Eysenck, H. J., & Eysenck, S. G. B. Manual for the Eysenck personality inventory. San Diego, California, Educational and Industrial Testing Service, 1963.
- Lynn, R., & Gordon, I. E. The relationship of neuroticism and extraversion to intelligence and educational attainment. *British Journal of Educational Psychology*, 1961, 31, 194-203.
- Parry, R. W. et al. *Chemistry: Experimental foundations*. Englewood Cliffs, New Jersey: Prentice-Hall, 1970.
- Postlethwaite, S. N., Novak, J., & Murray, Jr., H. T. *The audio-tutorial approach to learning*. (2nd ed.) Minneapolis: Burgess Publishing Co., 1969.
- Sherman, J. G. *Personalized system of instruction, 41 germinal papers*. Menlo Park, California: W. A. Benjamin Inc., 1974.
- Szabo, M., & Feldhusen, J. F. Success in an independent study science course at the college level as related to intellectual, personality, and biographical variables. *Journal of Research in Science Teaching*, 1971, 8, 225-229.

J. W. FRIESEN

The University of Calgary

Mennonites and Hutterites in Twentieth Century Alberta Literature With Special Reference to Educational Implications

This paper reports on an analysis of a variety of sources of literature dealing with the attitudes of Albertans toward two minority groups, Mennonites and Hutterites, from the turn of the century to the present. The format of the research was to identify, categorize and analyze literature such as personal correspondence, newspaper articles, government documents and research studies, noting specific attitude orientations for each decade. A final major concern of the paper is to note the implications of social attitudes for schooling in terms of curriculum and teacher training. (Dr. Friesen is Associate Professor in the Department of Educational Foundations, The University of Calgary.)

Sociologists have long been aware that public attitudes toward minority groups vary depending on the community, and it may also be demonstrated that such attitudes change over time depending on circumstances. This paper reports on an investigation of public concepts of two minority groups, both of which originated in the European Reformation as protest movements against the church, and subsequently formulated basically similar dissenting doctrinal statements. Although it might be quite correct to think of Hutterites and Mennonites as religious in origin their activities and practices have stabilized through the centuries to the extent that the sociologists' delineation of them as subcultures might be more appropriate. This is because Mennonites and Hutterites have developed a special identity through use of a special language, separate system of beliefs, customs, clothing and even food habits (Palmer, 1972, p. 1). The atypical life-style pattern of these groups, particularly their preference for isolation, has been responsible for their exclusion from full participation in society, although the reason for exclusion has frequently constituted a two-way street; sometimes it has been self-imposed and at times it has taken on the form of ostracism by members of the larger society.

The object of this research was to identify, categorize and analyze

literature in Alberta dealing with Mennonites and Hutterites during the time period from their settlement in the province to the present time, noting differences and/or fluctuations in the manner of public regard for these groups. A special concern of the research has to do with the implications of teaching about Alberta minorities in today's schools. The kinds of literature investigated included a wide range of writings from personal correspondence and newspaper articles to government documents and research reports. Every effort was made over a period of nearly a year to obtain any and all relevant materials about Mennonites and Hutterites through use of library facilities at the three Alberta universities as well as public facilities, correspondence with community functionaries, field trips, and other less regularized ways of obtaining information. In all, several hundred books, articles and other pieces of information were perused, each of which was classifiable as being about Mennonites and Hutterites in Alberta specifically.

Decade periods of time were utilized as a unit measure in the analysis of materials, partially for the sake of convenience, but also, because the various decades since 1920 correspond with significant public attitude emphases and changes toward these groups. It would have been possible to treat separately the results of the analysis of these groups, but the similarities noted were sufficiently parallel so the results have been combined to some extent. Fundamental differences in public attitude toward these groups vary in each decade, and these differences are noted in the discussion.

Identification of Groups

The general nature of life-style and religious beliefs of both Mennonites and Hutterites are fairly well known to people in Alberta, at least to the extent that their religious piety provides an intriguing cultural factor. (F. H. Epp, 1974; Toews, 1975; Hostetler, 1967; and Peters, 1965). Certainly awareness of the colonizing practice of Hutterites is commonplace and in certain communities has caused some consternation among neighboring farmers regarding possible Hutterite take-over of family farms. Living in colonies, for Hutterites, is a part of their religious belief pattern and dates back to the origins of the group. It constitutes the singular cause for most public uneasiness in Alberta regarding Hutterites. When the Protestant Reformation moved into full swing in the early part of the sixteenth century, leaders such as Jacob Hutter and Menno Simons (respective leaders of Hutterites and Mennonites) defied state church regulations and directed their energies toward establishing a counter religious movement in Europe (Smith, 1957, Chap. 1, 2). Their hope was to establish a church in keeping with New Testament principles emphasizing basic beliefs held even today by both groups as well as their Anabaptist counterparts: Bibliolatry, individualism in faith, pacifism, isolation, practice of the "ban", and refraining to take the oath (Heidebrecht, 1973, pp. 12-13; *Mennonite Brethren Herald*, June 27, 1975). In spite of inevitable persecution the movement spread to the German speaking territory around Switzerland, to South Germany and ultimately to other parts of the world.

As early as 1707 some of the Swiss Mennonites decided to go to Pennsylvania, thus starting the flow of immigration that was to bring

thousands of people to the new world (Bender & Smith, 1964, p. 60). Mennonite and Hutterian immigrations to North America occurred in different time periods due to the separate activities of the two groups caused by conflict over the ideal of communal living. Although the Anabaptism movement appeared to have common generic beginnings, not all adherents were aware of what was happening to their counterparts in other parts of Europe. Mennonites and Hutterites shared a great number of common ideas originally, but the Hutterites were virtually left untouched by Menno Simon's influence because of their own leader's ideas (Horsch, 1931, p. 6). Thus, while both groups were a part of a significant religious movement their development took on some unique characteristics from the very beginning which made future activities quite distinct from one another.

The first sizable Mennonite immigration to Canada occurred in the eighteen seventies with a gradual trickle of additional people well into the early part of the twentieth century. By 1921, Alberta had accumulated 3,131 Mennonites (F. H. Epp, 1974, p. 304). Hutterites, on the other hand, came to Canada after an initial immigration to the United States in 1874, and between 1918 and 1922 established nine colonies in Manitoba and fourteen in Alberta (Peters, 1965, p. 51). The decade preceding the twenties records the first reaction of Albertans to the new arrivals and marks the starting point for this research. A most fascinating phenomenon about the coming of the Mennonites and Hutterites to Alberta pertains to the nature of strong feelings, pro and con, concerning their immigration. It was far from an unnoticed happening.

The Pre-Twenties Decade: Immigration

The years immediately after World War I represent the most negative of attitudes toward Mennonites and Hutterites in Canada highlighted by a Federal Order-in-Council passed in 1919 which read, "If there are in the United States or Europe people of any class, whether they be called Mennonites, Hutterites, or any other kind of 'ites,' we do not want them to come to Canada . . ." — John Wesley Edwards (Epp, 1974, p. 391). There are indications that public sentiment concurred with this government action, and in Alberta the secretary of a largely attended meeting was authorized to send a resolution to Premier Borden protesting against Mennonites being allowed to take up land in Alberta. The fear was that since the Mennonites had been "kicked out" of Germany, Russia and America, they were being dumped into Canada and in danger of getting better treatment than the boys who fought for Canada. The Mennonite aversion to military training was identified as the basis for not wanting them in Alberta and a reporter present at the meeting noted that "there was not throughout the whole meeting the slightest sympathy shown to the Mennonite . . ." (*The Alberta Farmer and Calgary Weekly*, Sept. 26, 1918).

The words of The Honourable A. L. Sifton, Minister of Customs should have comforted the meeting because he had earlier stated that "there is no danger of any invasion of Mennonites or any other sect coming to Canada and escaping military service" (Glenbow Clipping File, Sept. 8, 1918). But there were other kinds of considerations to Mennonite objection; World War I brought with it the side-effect of hatred of things "German" tied with the

conscientious objection position of the Mennonites and gave cause for concern. The War Time Elections Act of 1917 specifically named Mennonites, Hutterites and Doukhobours, and the Mennonites resident in Alberta did not mind giving up the vote in order to avoid hostility. A few young men from a previously established Mennonite group at Didsbury did join the army but for the most part assimilation of any kind did not occur (Palmer, 1972, p. 95).

Objection to Mennonite settlement in Alberta emanated from some unexpected quarters when leaders of the 1918 Women's Christian Temperance Union meeting at First Methodist Church in Calgary adopted resolutions supporting the Federal Government's position on the subject granting no special favors to immigrant groups. They were particularly concerned about the life style of the Mennonites in that they "build large houses inhabited by a number of families, each family living in one room, which was a very bad state of affairs" (*The Morning Albertan*, Oct. 5, 1918). Equally skeptical concerns were expressed by people responsible for education in Alberta noting that the Mennonites would be required to conduct and support public schools, use authorized textbooks, and adequately equip the schools with teachers approved by the Department of Education. All factors would be subject to the regular inspection of school inspectors (*Lethbridge Daily Herald*, Sept. 26, 1918). Finally, the Great War Veteran's Association rallied to seek to make a test case against the Mennonites intending to have them detained and interned if they would not prepare to take up arms for the country (*Lethbridge Daily Herald*, April 19, 1919). Some even went so far as to seek the deportation of those who would not voluntarily participate in the armed forces when called on to do so.

Public feeling against Mennonites was not completely adverse and some of their ongoings were quite objectively appraised by certain observers and those having dealings with them to the extent that some positive feelings were noted. Mr. R. W. Pilling, on behalf of the Pilling Land Company which sold land to immigrating Mennonites from the United States, commented on their behalf that they had obeyed all government regulations regarding schools, even having two war veterans as teachers in the colonies, and were arranging their farm matters to reap the greatest possible produce from them. He replied in a public letter to the G.W.V.A. that opposition to the Mennonites' purchase of land had made them feel they should rather have migrated to South America and, if they did in the future, the veterans could purchase the land at cost from the Mennonites. In Commons debate an occasional positive spark, such as that voiced by Mr. W. D. Euler from Waterloo North, must have encouraged the Mennonites in their quest for a home. Mr. Euler designated the Mennonites as follows:

They are considered amongst us as being of the very best citizens . . . They are the best of farmers, understanding farming well; they are clean in their living; they do not live in communities; each family lives by itself, and they have never to my knowledge raised the slightest objection to having their children attend the same schools as are attended by the other children in our county (Commons Debates, 1919).

Similarly, a teacher in a Mennonite colony and former war veteran sprang

to the defence of the Mennonites when they were charged maliciously by an Alberta M.L.A., Martin Woolf, who stated that though he "held no brief for the Mennonites the truth about them should be known as a matter of British fair play." His teaching experience had taught him that the Mennonites essentially had no objection to schooling, they were a cleanly people, and, unlike the Finlanders among whom he had taught as well, "The Mennonites do not hate the Canadians, but on the other hand, show a disposition to meet us half-way" (Glenbow Clipping File, April 4, 1919).

Although the official data of Hutterian entry into Canada occurred in 1918 a great deal of correspondence preceded their coming, and was designed to assure for the Hutterites that they would be exempt from military duty and hold related privileges. A letter from Deputy Minister James A. Smart, in Winnipeg, October 27, 1899 offered the Hutterites full freedom of religious belief, the right to establish independent schools, and no interference with their commonwealth way of life. These rights were fulfilled on the part of the government and the settlement of the Hutterites in Canada was at first virtually unnoticed by the public. One writer interprets this in terms of the fact that other European groups were also immigrating to Canada during the 1918-1922 period and each group received equal press, Hutterites included (Peters, 1965, p.51). Generally speaking, the Hutterites fared better than the Mennonites during this time period insofar as press and government treatment was concerned, possibly due to their later entry into Canada, but there is also some evidence that the two groups were not readily differentiated by those who opposed their practices. A case in point concerns the military draft phenomenon at Raymond, Alberta where references to the Hutterites and Mennonites were made interchangeably by the War Veterans who were convinced that the "Mennonites must go" (*Raymond Recorder*, April 23, 1919). In summary, the entry of these people into Canada was not without misunderstanding and opposition, and it was up to their leaders and successors to see that the people proved themselves worthy of their claims.

The Twenties: Settlement and Expansion

Public sentiment toward Mennonites adopted a slightly less negative tone during this decade although Mennonite immigration reached an all time high in 1923 when more than 20,000 people left Russia to make their homes in North America. The exodus was of such large numbers that the Russian government became concerned about it to the extent of changing emigration policy to individual cases so as better to control it (Toews, 1967, p.202). The Canadian government, on the other hand, was willing to receive Mennonites because of their desirability as farmers for a pioneering country (Toews, 1975, p.152). Thus the Order-in-Council refusing emigration of Mennonites and other groups to Canada was repealed by the Liberal Government of William Lyon Mackenzie King upon the condition that: (1) the people admitted to Canada would find shelter and support; (2) they would be placed on the land, because Canada wanted only farmer immigrants; and (3) none of the immigrants would become a public charge (Heidebrecht, 1973, p.53). Although government action allowed ready immigration of Mennonites into Canada the motivation behind the changed policy was not necessarily entirely one of generosity. It was clear

that a large group of the Old Colony Mennonites of Manitoba were dissatisfied with governmental policy and were threatening to leave the country, and Premier Norris of Manitoba was particularly desirous of "replacing them with a progressive class of Mennonites from Russia" (Epp, 1962, p.105). In addition, the number of people moving to Canada from Great Britain and the United States had greatly diminished and contributed to a great need for more population in Canada. This made the scene for additional Mennonite immigration from Russia a very pleasant prospect, and numerous people took advantage of the situation until 1927 when Russian policy abruptly brought emigration to a halt. In addition, since the Canadian government permitted immigration limits to be set by the various provinces, Premier Anderson of Saskatchewan forbade further immigration despite the fact that he was pleased with Mennonite performance in that province. The Alberta government took a similar stand based on the unemployment situation in the province which was felt by Premier Brownlee to be threatened by further immigration. These actions made things quite difficult for Mennonites in Russia waiting for permission to enter Canada, and they were told that they would be sent to labour camps if the Canadian government would not allow them to immigrate (Palmer, 1972, p.98). In 1929 some Mennonites from Siberia were still trying to gain permission to enter Canada (*The Albertan*, Nov. 5, 1929).

Public sentiment toward Mennonites eased somewhat during the twenties, possibly because it was recognized that they were here to stay. The Mennonite attitude toward public schooling changed in that their children were permitted, even encouraged in some cases, to attend English schools. Mennonite elders feared the loss of religious identity through assimilation in schools but the gradual decline of German schools soon became apparent. Reporters had the habit of writing about "peculiar practices" of Mennonites, particularly their aversion to the automobile, but they were frequently praised for their farming abilities, commended for paying taxes, and admired for their family tenacity. So, while the general attitudes toward Mennonites softened somewhat during this time there were still occasional public expressions of dissatisfaction with their way of life, particularly related to land purchases or militaristic orientations. In Coaldale, Alberta, for example, a meeting of the U.F.A. was disrupted by a man who made "wild charges" against the Mennonites claiming they had purchased land too cheaply from the C.P.R., their children were educationally out of touch with the rest of the country, and some of them had been permitted to enter Canada while physically unfit to do so (*Lethbridge Daily Herald*, March 26, 1928). While his charges were calmly dealt with by those responsible for the meeting, the incident was a reminder of the fact that the Mennonites still had a public relations task ahead of them before they would experience total acceptance in Alberta.

Hutterite expansion during the twenties caused little consternation in Western Canada even though during the period immediately after 1922 all but three American colonies moved to Alberta and Manitoba. Hostile feelings arising from the land expansion question did manifest themselves later on, particularly in the early years of World War Two aided by the expressed views of certain politicians such as Premier J. E. Brownlee of Alberta who in 1931 summed up his impression of Hutterites in this manner:

We regret to have to say that these people have not proven very satisfactory immigrants. We quite admit that they are frugal, industrious and hard-working, but on the other hand they do not assimilate or mix with the other people of the province (Mann, 1974, p.24).

Earlier, the Premier along with J. R. Boyle, leader of the opposition, helped defeat a bill that would allow for the incorporation of Hutterite colonies on grounds that they would not tolerate communistic organizations in the province. Other opposition to the bill was voiced along the lines that incorporation would take away from the government the right to succession duties and other corporation taxes. In addition, one member objected that the colony in question was not applying for an "English" corporation title and therefore should not be granted one (*Lethbridge Daily Herald*, March 9, 1922).

Newspaper accounts of Hutterite life during the twenties report an occasional outburst of unhappiness with their being in Alberta even though their existence provided an easy subject matter for the curious sociologically-oriented reporter. Conclusions to two newspaper monographs written in the twenties imply that the Hutterites are an interesting and peculiar people; however, these accounts also helped to perpetuate a myth still held to by some individuals today, that the Hutterites have little to offer Alberta by way of economic advantage, local community benefit or assimilation through use of the English language or adoption of general customs.

It would hardly be accurate to suggest that during the twenties the Mennonites and Hutterites were regarded by Albertans as welcome immigrants and worthy citizens, but they faced instead a society to which they would need to prove themselves.

The Thirties: Depression and a Search for Identity

The thirties in Canada meant a reduced gross national product, mass unemployment, and crop failures. It was a time in which other phenomena besides minorities received attention; it was a time of poverty. For Mennonites the decade meant a concern for repayment of immigration debts, suffering fellows in Russia, maintaining the land, and coming to grips with a permanent identity in Canada. A considerable amount of relief work was undertaken by various Mennonite groups, but the challenge of perpetuating particular Mennonite beliefs and culture did not waver. Always an educationally minded people, the Mennonites established 16 Bible schools (or Bible colleges as they are sometimes called) between the years 1929-39, six of them in Alberta. Basically designed to inculcate religious beliefs and Bible teaching in the minds of the young, these institutions also provided the churches with spiritual leadership in both ministers and church school teaching (Heidebrecht, 1973, p.55). Immigration had come to an almost complete stop in the thirties, ending the synthesizing process of Russian and Canadian Mennonites, and allowing the latter to build an indigenous identity.

Economic developments were virtually at a standstill in Alberta during the thirties, and the Mennonite farmers, like their counterparts, struggled to maintain themselves on parched prairie soil. The media, as always, regarded them as somewhat of an oddity, alternately raising questions

about the Mennonite stand on war, Mennonite schools, and their preference for isolation. In Coaldale, a Mennonite farmer was elected to the position of trustee of the local school board winning his seat with at least a fifty percent non-Mennonite vote. About forty Mennonites attended the meeting called to announce the results of the election (*Lethbridge Daily Herald*, Jan. 15, 1930). It was a case of evidence to many observers that the slow process of assimilating Mennonites to Alberta life had begun. As one writer put it, "The Mennonite group as a whole had ceased to struggle against the world, and has to a large extent even forgotten its own distinctive group character" (Dawson, 1936, p.171). This observation was undoubtedly an over-simplification because assimilation cannot normally occur unless both groups, majority and minority, are encouraged in its fostering. In the case of the Mennonites, such was not the case even though occasional positive remarks about their agricultural ability could be recorded. It is entirely questionable that the Mennonites in the thirties desired full assimilation in Alberta.

There is evidence that Hutterite expansion in Alberta was by invitation of citizenry in selected cases. Although Premier Brownlee's attitude toward them was not favourable, the Raymond municipality near Lethbridge appealed to the Alberta Government to allow further Hutterian immigration on the grounds that Hutterites were good neighbours who paid their bills and taxes, and were honest in business (Mann, 1974, p.24). Part of the reason for the invitation was because it became apparent that the Hutterites were suffering less in farming at Raymond than others in the depression and the district citizens thought they could make use of the produce of Hutterian farms (Palmer, 1972, p.42). The mayor of Raymond was joined in appealing to the Alberta government by Joseph Card, a local business man, school inspector Owen Williams, and the Board of Directors of Lethbridge Board of Trade. In the Raymond area, at least, the thirties marked a pleasant relationship between Hutterites and public, despite rapid expansion and increase of colonies in Alberta (Peters, 1965, p.54).

In the rest of the province Hutterite popularity seemed to be growing. A local newspaper revealed its stand on Hutterites by complimenting the Hutterian ability in agriculture while still labelling them as having "quaint costumes in self-contained community homes" (*Calgary Herald*, May 27, 1933). A national magazine devoted several pages to the Hutterites in a very commendatory manner mixing curiosity and esteem as may be witnessed in the observation that, "If the world at large had rebelled against the futility of war 350 years ago when the Hutterites did, might we not have a more civilized and happier civilization today?" (*Macleans' Magazine*, Mar. 15, 1931). This compliment is perhaps the finest the Hutterites have experienced in their entire Canadian life. Their farms were favoured, their energies admired, their way of life accommodated, their closed schools tolerated, and even colony expansion allowed (*Calgary Herald*, Jan. 5, 1937). Such times were not quick to return to them.

The Forties: Pacifism and Another War

Canada declared war against Germany September 10, 1939, and immediately took action to meet the commitments of such a declaration. June 21, 1940 marked the day for royal assent to the conscription

measures, and the resultant action on the part of the Mennonite community was to send a delegation to the officials of the Department of National War Services regarding the Mennonite position on the question of non-military services. After due consideration by officials, Mennonites were granted a choice of three forms of alternative service in Canada: (1) work camps in national parks or at forest experimental stations; (2) service in agriculture or industry; and (3) service in the Royal Canadian Army Medical Corps and the Canadian Dental Corps (Epp, 1962, p.329). Naturally these arrangements attracted public attention and the media made the most of it. One newspaper ran a series of articles, "Strangers in our Midst," dealing with the unique practices and beliefs of Mennonites, Hutterites and Doukhobours. Estimating that there were about 7,000 Mennonites and 5,000 Hutterites in the province, the paper viewed their existence as pacifists in Alberta as "one of the thorniest, complicated problems which a civilized community ever faced" (*Calgary Herald*, June 22, 1942). A mingled respect was obvious in descriptions of these groups, however, and they were labelled as being ethically right but, practically speaking, horribly wrong. In a world where the meek are massacred and enslaved, they still believed that the meek shall inherit the earth.

The vignettes of Mennonite treatment in Alberta during the Second World War include some shocking chapters. Although some estimate that about 50% of eligible Mennonite men joined the armed forces during the war a significant number were sent to "alternative service camps" as they were known. In 1942, forestry camps were opened in British Columbia; in 1943, there were nineteen in British Columbia, five in Alberta, two in Saskatchewan, and one in Manitoba. The Dominion Government paid \$2.50 per day per man of which amount the camper received fifty cents and the rest of which was used for maintenance (Smith, 1957, p.705).

Mennonite men who did not enter direct war service were not necessarily forgiven by public opinion when they opted for alternative service. A philosophical problem of allegiance bothered some Mennonites about participating in the war in any way, a few of them even showing sympathy for the Nazi cause at the outset of the war. Resentment by Anglo-Saxon groups about Mennonite use of German grew to the extent that the Mennonites closed their German Sunday Schools and German libraries. The Loyalist League in Pincher Creek urged that the government purchase lands held by Mennonites and resell them. In Vauxhall, two Mennonite churches were burned (Palmer, 1972, p.100).

The war effort motivated the Mennonites to make relief contributions through the accumulation of monies, clothing and canned food. The Mennonite Central Committee, started on September 27, 1920, was the agency through which 43,000 quarts of canned meat and vegetables were shipped to Europe from the brethren in Saskatchewan in 1953. In addition, 1,800 pounds of beans, 1,000 pounds of soap, and \$4,000 were sent. Total M.C.C. contributions made to the war relief in monetary funds during the years 1942-47 totalled \$252,099.81 (Epp, 1962, p.333).

Public and political conceptualizations of Mennonite life leaned heavily toward the negative side of the ledger during the war, partially induced by resentment toward original agreements made with the federal government. Occasional acknowledgements of Mennonite contributions are identifiable,

however, particularly with regard to Mennonite relief intentions. Mennonite leaders approached governmental officials in 1940 and offered to care for war refugees to Canada rather than send money for their needs to Europe. Although they felt themselves unable on conviction to participate in offensive measures, the Mennonites did offer to provide for any additional refugees the government might allow to immigrate (*Albertan*, June 12, 1940). Simultaneously, some members of parliament were debating the very agreements made by the government that allowed Mennonites to refuse to go to war (*House of Commons Debates*, 1940).

After the war, Mennonites in Canada again sought to resume immigration of their friends and relatives but were hampered, not by public feeling of governmental regulation, but by physical handicaps. Conditions in Canada forbade the arrival home of many Canadians who had gone overseas and transportation facilities were inadequate to accommodate them let alone a new flock of immigrants (Epp, 1962, p.391). Policies of the Liberal government again favoured immigration, and the public, anxious to have the economy bolstered, forgot their resentment of pacifists, and some Mennonites were again permitted to enter this country. Those who could not be accommodated because of transportation difficulties, reluctantly went to South America.

The Second World War marked the peak of public resentment against Hutterites; this was precipitated, naturally, by their pacifist stand, but other complaints were lodged as well. Hutterites were criticized on several counts. They were labelled ignorant since they believed in elementary education only, they refused to be fully assimilated, and their "undemocratic collective ways" allegedly gave them an unfair economic advantage in Alberta (Mann, 1974, p.25). Still, some reporters could not help noting positive features of Hutterites in their monographic descriptions of colony life. A quite positive sketch was circulated by one national journal concluding that although a breakaway from colony life will eventually occur, it will not be in our lifetime (*Canadian Geographical Journal*, June, 1941). A Calgary reporter was not so kind in his descriptions though he admitted to seeing fine handicrafts and effective farming methods among Hutterites. He dismissed the lack of vice, crime, poverty, and laziness in the colonies as a high price to pay for independence, personality, and individual freedom as we understand it (*Calgary Herald*, June 29, 1942).

In March, 1942 the Alberta Provincial Treasurer in the Social Credit government, Solon E. Low, was convinced that legislative action was necessary to protect the Hutterites from negative public feeling, so he introduced a bill to prohibit the sale of land to enemy aliens and Hutterites. Amendments were also passed to forbid the leasing of land to these people, and by 1944 the government revised the Land Sales Prohibition Act so that it applied to Hutterites only (Mann, 1974, p.27). The wording of the government's intent was clear in a clause which read ". . . includes Hutterites or Hutterian Brethren and Doukhobors but shall not include any church or other religious organization or congregation" (Peters, 1965, p.55). The Doukhobors were apparently added to the clause for sake of appearances, although there were few in Alberta, and the Hutterites felt put out that they were not recognized as a church. Governmental prejudice

was quite precise and well summarized by L. S. Turcotte, legal representative of the Hutterites in Alberta:

Unless the Sunnyside Colony (for example) can buy more land they will have to leave the country. If such is the wish of the people of this province then I suggest that the Act should say so. It should say that although we welcomed these people in 1918 and as late as 1934, we, the people of Alberta, have changed our minds and we now intend to drive them out of this province. (Peters, 1965, 56)

If the position of the *Lethbridge Herald* was indicative of public sentiment, the people's answer to Mr. Turcotte was that to favour the Hutterites in Alberta was to "maintain little foreign islands here in Canada." *The Calgary Herald* was even more deliberate in stating that "... we do not believe any good will come, either to Alberta or, in the long run, to the Hutterites themselves, if they are permitted to set up more and more of their islands throughout the province—islands, where all but the leaders are, in effect, imprisoned and where boys and girls (some, quite likely of talent) are refused any chance to enter the broad stream of Canadian life" (*Calgary Herald*, March 25, 1947).

A writer for the *Lethbridge Herald* on August 29, 1942 sought to clarify the situation of the Hutterites with respect to their pacifist stand, arguing that their exemption privileges were not unlike those afforded other conscientious objectors in Canada's history, Mennonites, Quakers and Tunkers. Because the Hutterites were located in Southern Alberta in significant numbers, public awareness of their wants became acute to the extent that they were categorized as having special status and not deserving of it. Promoting a unique way of life brought other attention to the Hutterites as well. Their policy that "the meek shall inherit the earth" was interpreted by one reporter as the making of a grave mistake. Criticizing the Hutterites for "taking but not giving to Canadian society", he castigated them as being a negative quantity in Canadian society, a loss. They accept, but do not give. (*Calgary Herald*, December 4, 1943). Further hostility was encountered by Hutterites when they sought to develop a new colony in northern Alberta and experienced opposition by the Canadian Legion Branch. Although governmental policy permitted limited Hutterite expansion by 1948, the land first had to be offered to veterans. However, the Legion complained that the veterans could not match prices paid by Hutterites (*Calgary Herald*, July 10, 1948). In fact when the Hutterite Act was tested in the courts in 1949 it withstood arguments against it thereby denying additional purchase by a Cardston, Alberta Colony. When it was rumoured in 1949 that some Hutterites were planning to migrate to Mexico because of the difficulties of expansion in Alberta and rejection by the U.S.A., a local paper reported that even if this were to happen the Hutterite problem would only partially be solved (*Calgary Herald*, November 9, 1948). Thus, by the end of the decade of the forties, both Mennonites and Hutterites were granted a reprieve from contrary public opinion regarding their pacifist stance only to discover, on the part of the Hutterites, that their colonizing practices were to become a target of public concern. The Mennonites, on the other hand, were allowed to bring additional numbers into the country with less opposition. By the end of the forties Canada was still a long way from being a land of "milk

and honey” for these groups at least, so far as acceptance of them was concerned.

The Fifties: Reluctant Accommodation

Mennonite experience in Alberta during the decade of the fifties indicated a slight trickle of immigrants from Russia amounting to 604 people from 1950-59 (Epp, 1962, p.443). These represented for the most part what has been called “hard-core” cases, people who were difficult to arrange for because of medical or political reasons. Their entrance to Canada was made primarily to the three prairie provinces as well as Ontario and British Columbia, and added up to over 12,000 people from 1947-61. Undoubtedly their immigration was so slight as not to be noticed by most residents of the communities in which they were allowed to make their homes. Not too occupied with welcoming new relatives or relief work connected with the war, Mennonites in western Canada generally found themselves coping with cultural matters, anxiously attempting to maintain their unique identity without relenting to total isolation as a means of preserving it. The use of television became a very controversial issue in the Mennonite Brethren Church, for example, and serious discussions took place at their annual conference in 1954 and again in 1958. In the earlier conference delegates were warned against making too lengthy a declaration on the subject, but such was adopted in 1958 (Toews, 1975, p.339). If the “world” was not aware of Mennonite endeavours in the 1950s the Mennonites were certainly not going to let too much outside influence alter their way of life.

Nineteen fifty-four marked the year for a school conflict in northern Alberta involving the Old Colony Mennonites who sought isolation there in the 1930s. Until 1953 they were allowed to remain separated from the rest of the community until neighbouring non-Mennonites became concerned about the condition of schools in the area and the fact that Mennonite children were not attending school. Mennonites were warned that they must deposit \$100 per family which would be refunded when they sent their children to public schools. In order to avoid this some families moved to Worsley, Alberta and to Vanderhoof, B.C. (Klassen, 1970, p.185). When public pressure was again applied to this situation in 1969, some 90 out of 580 students left with their parents for Bolivia in South America where they were assured of educational freedom. Since then about half have returned to Alberta.

Newspapers in Southern Alberta during the fifties contained many stories of Hutterites, the majority having to do with purchase of additional land and colony expansion. In addition to the Alberta cabinet Order-in-Council of 1947 which appointed a legislative committee to hold hearings regarding the Land Sales Prohibition Act, the government set up another legislative committee to study land acquisition in order to determine whether or not the provisions of the Communal Property Act “were in the best interests of the agricultural industry of Alberta” (Mann, 1974, p.29). The result was the abolition of the forty-mile limit and the establishment of a three member Communal Property Control Board which would hold public hearings regarding any application for land by a Hutterite colony. The results of these hearings would be summarized by the Board for the

cabinet who would make a final decision. A further prohibition was that no Hutterite could purchase land as an individual and then operate it communally. The surge of anti-Hutterite opinion that emerged surrounding these hearings led the government to amend the stipulation on hearings putting them on an optional rather than mandatory basis (Mann, 1974, p.30).

Public opinion regarding Hutterite expansion is at least hinted at in accounts dealing with separate incidents such as the following: the Medicine Hat Trades Council opposed Hutterite expansion (*Lethbridge Herald*, October 19, 1951); the Alberta command of the Canadian Legion asked the provincial government to restrict land sales to Hutterites (*Lethbridge Herald*, June 16, 1953); in Commons debate, Mr. D. R. Gundlock of Lethbridge argued that Alberta farmers could not compete with Hutterites who should not be allowed to expand their land holdings (*Debates of House of Commons*, 1956, p. 2953); and the Farmers' Union of Alberta argued that land sales to Hutterites near Lethbridge violated the Properties Act (*Lethbridge Herald*, December 3, 1958). In September, 1959 the Hutterite Investigation Committee under the chairmanship of C. P. Bentley recommended that some form of regulation governing acquisition of lands by Hutterites be maintained but with administrative changes, and charged that the existing educational facilities established for Hutterite colonies were unsatisfactory in regard to instruction in the responsibilities of Canadian citizenship (*Hutterite Investigation Committee Report*, September, 1959, pp. 45-46).

Although the land question occupied most newspaper space with regard to Hutterite items during the fifties, there occurred as well in print several monographic accounts of Hutterites usually casting them as somewhat peculiar but noting as well their farming contributions and solid family life. Criticisms of Hutterites pertained to their pacifism, communal life-style, and authoritative religious structure. Rumours of Hutterite migrations to Mexico received some press as did the establishment of colonies in Saskatchewan because of land sale restrictions in Alberta. The decade of the fifties demonstrate vividly the amount of public attention a minority group can attract when an issue such as land expansion is at stake. It is quite obvious that Mennonites fared better than Hutterites in the public eye because of their preference for single-family dwelling styles even though their religious convictions on war, community and simplicity are very similar to the Hutterites. The threat felt by the public is much more obvious when larger groups of people are involved in atypical behavior.

The Sixties: Mixing Bitter and Sweet

The sixties were good for Canada, and Alberta particularly, and her residents enjoyed the prosperity, success and freedom the decade offered. Minorities such as the Mennonites wrestled with the ethics of the time, gradually coming to grips with the fact of their loss of identity as a rurally-oriented society and moved to the cities in greater numbers (Driedger, 1968). Urbanization for most Mennonites meant a struggle with principles of ethics, politics and socialization. The decade produced a number of academic studies of Mennonites by Mennonite scholars, each of them

probing the composition and endurance of basic Mennonite sociological status and religious principles (Doerksen, 1963; P. G. Klassen, 1958, 1970; A. J. Klassen, 1965; and Sawatsky, 1964). At the same time expansion of Mennonite population continued and the continuing increase of Mennonite homes, schools and churches in cities testified to this.

The sixties bore the marks of some fairly difficult times for Mennonites in northern Alberta pertaining to the school question. As a compromise to Mennonite rejection of public schools, the Provincial Department of Education allowed liberal Mennonite teachers to serve in the colonies of LaCrete and Fort Vermilion, but use of the German language was restricted in at least one instance to religion only, and absolutely no reading and writing in German was allowed. The intrusion of the government into colony life continued and in 1959 a gravelled highway was built through the middle of the colony. Two years later the Tompkins Landing Ferry was installed, shortening the distance to the "outside" world by about 100 miles. Finally the leaders of the Old Colony Mennonite Church reluctantly gave way to the introduction of automobile ownership among their members (Harder, 1965). In 1965 about one hundred Mennonites from the area left for Bolivia where they had been assured of freedom to maintain their religious customs. Their major source of dissatisfaction in Alberta was voiced as being the provincial government's educational policies. As one leader put it, "In some rooms in the school they don't even pray . . . There are too many things going on at school that we are taught to keep away from" (*Albertan*, July 25, 1967).

Liberal Mennonite groups have been less reluctant to relocate when educational or religious assimilative pressures bear down on them. In fact even the record of church membership maintenance among Mennonites in the past two decades has not been too envious. In urban areas particularly, a considerable amount of passing has been practiced by middle aged and young people of Mennonite background insofar as other evangelical churches are concerned. In Lethbridge, for example, a study in 1960 showed that of 973 people of Mennonite background in the city, only 82 were associated with Mennonite churches. In the three largest Alberta cities only 613 of 8,078 were attached to a Mennonite church of some kind (Palmer, 1972, p.105). Thus while the peculiar practices of Mennonites were not of particular interest to the public (even the several community histories which were produced during the sixties in areas occupied by Mennonites failed to mention their occupation), the environs of the world attracted more than just a few Mennonites. Some were able to justify their leaving churches of Mennonite identity through finding similar religious beliefs in non-Mennonite churches, but leaders in the Mennonite church were not always as confident that the real essence of Mennonitism would be maintained through such action.

Hutterite communities in the sixties experienced a continued harassment against their purchasing additional lands in Alberta, but they were surprised on occasion to find allies in their cause when they did not expect to do so. While the public, press, and government were fundamentally still opposed to further infiltration of Hutterites into Alberta, some individuals saw this objection as an infringement of basic human rights and spoke up for the Hutterites. A few cases in point will illustrate this. In 1960 the

Alberta Legislature eased regulations on Hutterite communities, banishing the forty-mile spacing limit while retaining present provisions as to size of colonies (*Financial Post*, April 2, 1960). The Honourable L. C. Halmrast, Minister of Agriculture, argued that Hutterites deserved special provincial attention because their unique requests for governmental intervention reflected a wider concern than could be accommodated locally (*Lethbridge Herald*, Jan. 18, 1960). In Ottawa, a C.C.F. member of parliament from Burnaby-Coquitlam, B.C., Erhart Regier, accused Jack H. Horner, P.C. member of parliament for Acadia of religious discrimination, arguing that Horner was using the Hutterites as a "whipping boy" in the Commons in order to further the aims of the western farmers. Mr. Regier stated that the "capitalist neighbours" of the Hutterites were "green with envy" and had elected an MP to appeal to the government to tax the Hutterites (*Lethbridge Herald*, March 24, 1960). A similar defence was taken up by Dr. John A. Hostetler, a professor of sociology at the University of Alberta who stated that Hutterites were being persecuted in Alberta for their unique way of life when in a pluralistic society they should be allowed to co-exist with the larger society without losing their identity, and with mutual tolerance, respect and responsibility (*Lethbridge Herald*, November 30, 1960). Another professor from the University of Alberta, Norman Schules, suggested that the Hutterites had been pushed around for 450 years. Finally, a United Church minister in Calgary made headlines when he devoted a Sunday sermon on the topic that Hutterites should not be bullied out of their way of life. His action was complimented by a leader of a Hutterite colony who addressed a letter to a local newspaper in appreciation (*Calgary Herald*, January 21, 1965).

Douglas Sanders adds an insightful interpretive note when commenting on Hutterite land purchase restrictions, noting that legislative actions often serve as a means of strengthening their solidarity. Legislation has been partially self-defeating in that it has retarded the move toward friendly co-existence and cooperation and has been interpreted by Hutterites as persecution, and as monopolistic action by small farmers who usually reside in proximity to colonies (Sanders, 1964). Amid the bitter and sweet noises sounded out about Hutterites has been the more perplexing philosophical issue regarding the role of minorities in a pluralistic nation such as Canada. The extent to which such groups should be allowed to practice their unique styles of life without larger society's full approval incites disapproval from many corners, even from those who are not certain as to what a solution might be (*Friesen*, 1973). It seems quite possible that the nonconforming ways of the Hutterites are in some cases themselves sufficient to disturb, irritate, and arouse the prejudice of otherwise reasonable people (Peters, 1965, p. 183). When correct information is obtained the prejudicial manifestations tend to diminish somewhat, but solutions which entirely reduce tensions are not readily forthcoming. Even the Alberta government appeared to have regrets about the Communal Property Act as was later evident in the rescinding of the Act (*Financial Post*, February 13, 1965). Perhaps the sixties reflect more than anything else the phenomenon that while Hutterite expansion in Alberta was still viewed negatively, some individuals were less certain about the legality of such opposition; there were even a few who questioned the ethics of such a

position. This did not lessen the nature of feeling about Hutterites but it did retard the import of it.

The Seventies and Multiculturalism: A Thorny Slogan

Canadian newspapers, magazines and research literature of this decade are replete with stories about the two groups under discussion, both negative and positive, although the tone of most of the literature would indicate that the federal government's multicultural concept was not entirely misconceived. Certainly the Alberta government acted in the face of direct opposition in appealing the Communal Properties Act and people from various towns in southern Alberta flocked to the legislature to protest their action. In essence the Alberta government had no choice because the human rights legislation passed by the legislature contradicted the Communal Properties Act thereby causing an unavoidable clash between principle and practice if the policy was continued in force.

Perhaps it was because of public reaction to the earlier policy of biculturalism and bilingualism established by the federal government that new approaches to the phenomenon of cultural pluralism in Canada were sought. In any event the Government of Canada quickly made available research grants for the development of multiculturalism in the country, even sponsoring regular advertisements in various ethnic magazines. In 1974 the office of the Secretary of State of the Government of Canada made available a publishing grant to a committee in Manitoba for the production of a commemorative book honoring Mennonite culture in Canada since 1874 (G. K. Epp, 1974). Basically the people of Canada still view Mennonites as something peculiar, a social entity to be studied curiously, perhaps even admired from a distance, but not as an essential component of Canadian society. This attitude is at least partially the fault of the Mennonites who have long considered themselves "in the world but not of the world." Hence communication with non-Mennonites has been minimal, limited primarily to economic or educational situations.

One Mennonite historian explicates the position of the Mennonites in Canada as "being quiet in the land" restricting political involvement to the local community rather than attracting provincial or national attention through elections (Toews, 1975, p.345). This attitude is changing, however, and more Mennonites are interpreting the concept of cooperating with government as a legitimate social engagement rather than totally abstaining from political involvement. Separation from worldly activities is still a vital concern for most Mennonites and adherents are urged instead to participate actively in affairs of the Mennonite church and in the community. Of course the Mennonite orientation varies within groups; the Holdeman people, who are more conservative and fundamentalistically inclined religiously do not encourage political involvement although recent developments have brought a host of new factors into their lives: labour unions, social insurance, insurance, working on Sunday, loyalty oaths, educational requirements and farming associations. Presently they have even begun to serve on community farm cooperative boards and school boards (Hiebert, 1973, p.468). The Amish Mennonites of Ontario dwell communally and are even more conservative in their political outlook, refusing to allow their membership even to vote in civil elections. There is

evidence that on at least one occasion Amish people did serve in some kinds of civil office, as reeve and councillor (Gingrich, 1972, p.129). A unique twist of affairs confronted members of the Bergthaler brotherhood who migrated to Canada in 1874 in that some of them signed a complete Canadian oath of allegiance before they knew its details. Some men did serve in the army, much remembered in prayers by a somewhat frustrated group of churchmen. In 1931 a Winkler physician ran for the Manitoba Legislature and served five years with the Liberal Government; he received an almost total vote of confidence from the local church when he originally approached them with his decision to run for office (Gerbrandt, 1970, pp. 315-317).

During periods of war the Canadian public has tended to react negatively toward the Mennonite position on war and political involvement even though Mennonites have consistently stated their position as one respecting the governments of men. During the seventies when pacifism is generally accepted as an alternative to war worthy of analysis, at least by many young people, the Mennonites' stand is conceived as less peculiar than it formerly was. Multicultural acceptance of conscientious objectionist positions are also much less distasteful during a decade when Canada is not actively involved in international war. The results of these factors demonstrate that in Canada, including Alberta, Mennonites in the seventies receive virtually no public attention other than the occasional magazine write-up, usually about the novel life-styles of the Amish or Old Colony Mennonites and their lack of need for the outside world.

It is of paramount importance to most Mennonites that their own message of peace, simplicity and brotherhood be captured by their other worldly brethren. The difficulty faced by Mennonites in the seventies is that of being sensitive to sharing with non-Mennonites the message of good will they believe to be essential, and maintain at the same time the privacy and "aloofness" required to preserve their own cultural identity. As is usually sociologically true, this tightrope will not necessarily be walked consistently or effectively. There is some evidence that the identity struggle is going on among Mennonites. A survey of nearly 200,000 members of five Mennonite denominations in the United States and Canada concluded that the four hundred year old Anabaptist vision originally conceived is still an ongoing concern. Managed by two Mennonite sociologists, J. Howard Kauffman of Goshen College and Leland D. Harder of the Mennonite Biblical Seminary, the research indicated that the Anabaptist concept of religion as a way of life predominated Mennonitism as a subcultural pattern based on certain foods, clothing styles and language (*Mennonite Brethren Herald*, June 27, 1975). The extensive nature of this research indicates that the main thrust of Mennonitism will continue to be a factor in the Canadian way of life and public reactions to it will similarly occur. As the present survey of literature indicates, the nature of that reaction may vary in direction depending on the social situation of the years ahead. Educators will naturally be concerned about the input of schooling as a factor in bringing about positive and tolerant attitudes in order to help Canadians attain a high respect for pluralism as a fact of Canadian life.

The land purchase question looms high in the public mind in the

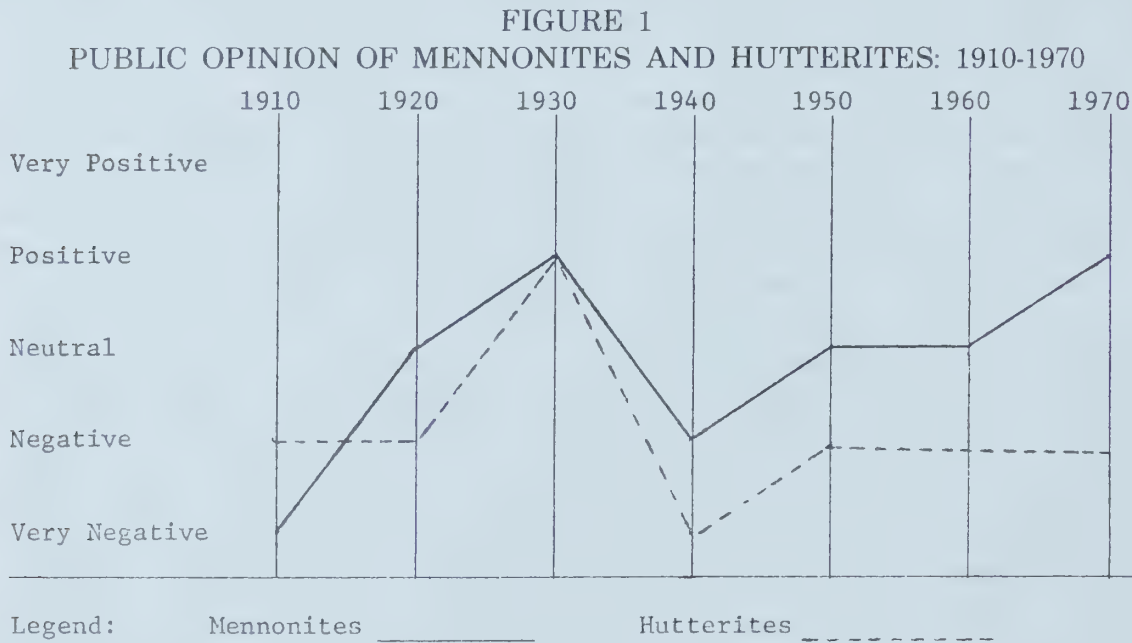
seventies as Hutterites have been given permission to add to their holdings on the grounds that anyone in Alberta should have equal rights to acquire land. Public protestations have continued and Hutterites have been accused of not supporting local community programs, crowding out other farmers, not paying their share of taxes, and placing a burden on taxpayers for insisting that their children attend colony schools. The merits of these criticisms have been the object of extensive research studies most of which have proven the criticisms incorrect or based on misinformation (*Report on Communal Property*, 1972, pp. 17-19). Hostetler points out that the fact that Hutterites are different is often the cause for prejudice against them even though much of what is said about them is based on false information from people who know nothing at all about them. People say about them that the Hutterites are Marxists, they do hostile acts like burning farm buildings of neighbours, they pay no taxes, the government provides them with free land, and they have a high rate of mental illness—all of which are false. But even people who know about Hutterites are sometimes filled with hostile feelings simply because Hutterites are prolific, they are efficient, and they are different (Hostetler, 1961).

One of the inroads the outer community has been able to negotiate with respect to Hutterites is education. With government requirements being that Hutterite children must be taught according to Department of Education curriculum, teachers for Hutterite schools have represented the community fairly well in their function in the colonies. If teachers are envisioned as potential changers of the Hutterite system, however, their sentiments do not lie wholly in that direction. One group of teachers has expressed the conviction that if Hutterite children were lost to the colonies through a social change kind of teaching philosophy, what kind of progress would that really be? (*Albertan*, Sept. 20, 1970). Comparatively, Professor Mann's research of colony teachers indicated that the controls the Hutterites try to impose on teachers may be less confining than restrictions created by a teacher's own background and attitude (*Albertan*, Sept. 17, 1974). In Mann's estimation the kind of teacher most likely to have any effect on Hutterites would be one who would stay in a colony for a number of years, perhaps the wife of a local farmer whose livelihood is in the district. This teacher is usually the kind of person with more at stake than younger persons who might merely be experimenting on a colony with their teaching abilities and interests. Mann's research also indicated that the quality of education in the colonies was satisfactory in comparison with that of other Alberta schools. This is a significant statement in that the charge is often made that Hutterite schools suffer from an inferior type of education because of inadequate facilities, etc.

At present it appears that mixed perceptions of Hutterites will continue as long as people are unaware of or only vaguely acquainted with what might be described as a very unique sociological pattern of living. Few people, hopefully, will be as negative as those who suggest that the Hutterites would be better off if they moved on if they don't like our society (*Lethbridge Herald*, June 13, 1974). Some, of course, will continue to act as confused as the individual who noted, "We're not opposed to Hutterites as people . . . It's the way they disrupt our way of life here" (*Lethbridge Herald*, April 16, 1973). And as though it is not enough to be positive, the

Alberta Conference of the United Church demonstrated recently the futility of patronizing positive action when they voted to attempt to “understand them,” going so far as to invite Hutterite participation into ecumenical and interchurch activities (*Lethbridge Herald*, June 9, 1973). Such a gesture might easily be applauded by people in the dominant sector of society, and while viewed positively by Hutterite leaders, its realization on the part of the Hutterites would be a violation of their fundamental religious belief. As such, the resolution represented nothing more than an empty well-wish.

The wish of Hutterites is to remain in Alberta, a land which they wish to honour and respect legally. They have expressed a desire to adjust to demands made upon them so long as they are allowed to practice their religion without persecution or restriction. It seems a simple request to make, but in the case of the Hutterites it is laden with sociological doubts. Freedom and privacy to the Hutterite too frequently spell suspicion and repugnancy to the average Alberta citizen.



The above graph illustrates the status of Mennonites and Hutterites according to public opinion in Alberta in this century. It should be pointed out that public opinion and governmental policy have not always been synonymous in this province, and it appears that government leaders have on occasion disregarded or bypassed public opinion in formulating policy regarding immigration or in other dealings with minority groups. The first indication of this kind of governmental orientation occurred in the early decades of this century when public opinion generally opposed the entry of Mennonites and Hutterites. In the nineteen twenties the Alberta government reversed its stand on immigration of certain groups, appearing to take to heart the attitude of some Albertans who objected to their entry. By 1930 the Mennonites were viewed as a group who might assimilate into Alberta life because of their willingness to participate in some civic matters, while the Hutterites were suddenly being welcomed because of their much needed farming skills. By 1940 the effects of World War II were felt in Canada and those who stood by their pacifist stand, as the Mennonites and Hutterites

did, were regarded as being less than faithful to the country. During the fifties when the war was forgotten by many people, the anti-war stand of the Hutterites and Mennonites was overlooked. The Hutterite land purchase question emerged as the primary issue responsible for negative feelings against them, seconded only by reference to education, specifically Hutterite schools. These topics retain their media appeal even to the present. Public opinion toward Mennonites has become milder in recent decades partially due to gradual assimilative maneuvers by some Mennonites coupled with what might be a fairly successful multicultural approach by the Canadian government. The policy may have been at least partially responsible for the resultant easing up of public opinion against some minority groups.

Perhaps the singular truth of this study reflects the fact that social perceptions change depending on conditions featuring psychological pressures, tight economic arrangements, significant population shifts, etc. Whatever the reason, it is evident that Mennonites and Hutterites have not always been welcome in Alberta because of their varying values and life patterns which at times have appeared to threaten the status quo. In the case of the Mennonites there has been less pressure for conformity, but the communal practices of Hutterites sustain them in the spotlight as a different, and even threatening group. This furnishes evidence that the federal multicultural philosophy endorsing an acceptance of the pluralist culture principle still lacks in public acceptance. The sociological and psychological implications are far reaching, and perhaps find their most urgent fulfillment in the schools of this province.

Educational Implications

In Canada, schools have proven to be most versatile institutions and educators have experienced many added responsibilities through the decades as the impact of democratic education has continued to reach more and more people. Today's schools handle a complex variety of subjects, and feature as primary concerns skill building activities, fact dissemination and value education. In the latter category particularly, the responsibilities of educators presently resemble the tasks traditionally assumed by parents, protectors, and instructors in moral and ethical behaviour. It might be argued that schools should concern themselves only with factual data, but when one takes into account the success that schools have had in dealing with the "software" of learning, this development seems less ominous. Similarly, since it is a reality that institutions such as the family and church have let slip from their grasp certain youth caretaking functions pertaining to ethics and values, and have relegated them to the school, it is logical that the educators should do their utmost to execute this mandate as efficiently as possible.

One of the more conspicuous subject matter concerns of value teaching has to do with Canada's minority groups. While it might be virtually impossible to treat fully, in the classroom, information pertaining to the cultural patterns of all of Canada's minorities, a careful selection of a few relevant examples might be quite sufficient to serve as a basis for acquainting students with the varying culture maps existent in this country. The first requirement for such a selection would be familiarity

with content for the teacher. It will do little good for anyone to attempt to point out the vignettes of unique cultural forms in Canada if one is not thoroughly acquainted with their underlying values. Certain social practices of some groups, for example, make no sense to the casual observer, but to the trained eye of the ethnographer every component of every social system has a rational ground of explanation for its existence. In a sense, every teacher working in the area of minorities in Canada is required to be a student of culture.

A second implication of this research deals with public attitude toward minority groups in Canada. The negative impact of such attitudes on minorities might be reduced if students in school are taught early to appreciate differences in thought and practice. In the case of the Hutterite culture specifically there is evidence to indicate that very negative attitudes toward them may be correlated with lack of familiarity with their way of life. Thus students need to be informed not only about the content of the minority group phenomenon, but they should be brought to realize what public regard for them is, and be challenged to search out their own perceptions and attitudes toward individual and group differences.

A third implication, educationally, has to do with universities and training centres for teacher education. In the past decade significant strides have been made in Canada in the field of what has come to be called "intercultural education" (Friesen, 1972), an area of study and practice emphasizing specific content and techniques as preparatory for individuals contemplating a teaching career in communities having minority groups resident in them. Although the vast amount of work in intercultural education has been accomplished with regard to Canada's native peoples (Friesen, 1974), other minorities are gradually being included in such curricula. Social studies teachers, more than any other subject matter specialists, deal with people and culture-oriented data, particularly the kind which has been the subject of this study. Teachers who are sensitive to what some kinds of learning experiences can do to students in terms of applying to themselves the lessons encountered in school will recognize that such learnings are not unaccompanied by introspective musing on the part of the student. A perceptive teacher will skillfully assist the student in coming to understand the essential connection between value content and personal obligation, but will not seek to interfere with related future student actions. This task will necessitate for the social studies teacher a walking of the affective tightrope between the pole of indoctrination on one hand and the pole of unfulfilled obligation on the other. Some techniques are better utilized in this procedure than others. The conscientious educator cannot disregard the obligation of illustrating to the student that insofar as minority groups are concerned, the fundamental understanding to be attained is not merely a cultural one. Rather it involves the grasping of a basically logical presupposition essential to the Canadian way of life—that human beings should not be regarded merely from the standpoint of an individual's perceptive experience, be it economically or psychologically influenced, but should be allowed the privilege of personal identity. That identity necessarily includes the privilege of adopting varying life-styles and beliefs without

undue external hindrance. When that lesson is learned, multiculturalism in Canada will cease to be a slogan and assume functional proportions.

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References

The following sources have been selected for further reading omitting listings of newspapers, weeklies and journals with the exception of mentioning specific articles.

- Bargen, P. F. *The Mennonites of Alberta*. Unpublished Master's thesis, Vancouver, University of British Columbia, 1953.
- Bender, H. S., & Smith, C. H. *Mennonites and their heritage: A handbook of Mennonite history and beliefs*. Scottdale, Pa: Herald Press, 1964.
- Bennett, J. W. *Hutterian brethren: The agricultural economy and social organization of a communal people*. Stanford, California: Stanford University Press, 1967.
- Boldt, E. D. *Conformity and deviance of the Hutterites of Alberta*. Unpublished Master's thesis, University of Alberta, Edmonton, 1966.
- Dawson, C. A. *Group settlement: Ethnic groups in western Canada*. Toronto: Macmillan, 1936.
- Doerksen, J. G. *History of education of the Mennonite brethren of Canada*. Unpublished Master's thesis, University of Manitoba, Winnipeg, 1963.
- Driedger, L. (Ed.) *Mennonites in urban Canada*. A series of papers reprinted from *Mennonite Life*, 1968, 23, October.
- Driedger, L., & Peters, J. *Ethnic identity: A comparison of Mennonite and other German students*. *Mennonite Quarterly Review*, 1973, 47, 225-244.
- Epp, F. H. *Mennonite exodus*. Altona, Manitoba: D. W. Friesen and Sons Ltd., 1962.
- Epp, F. H. *Mennonites in Canada 1786-1920*. Toronto: The Macmillan Company of Canada, Ltd., 1974.
- Epp, G. K. (Chairman, The Anthology Committee) *Harvest: Anthology of Mennonite writing in Canada*. Altona, Manitoba: D. W. Friesen and Sons Ltd., 1974.
- Francis, E. K. *In search of Utopia: The Mennonites in Manitoba*. Altona, Manitoba: D. W. Friesen & Sons, 1955.
- Friesen, I. I. *The Mennonites of western Canada with special reference to education*. Unpublished Master's thesis, University of Saskatchewan, Saskatoon, 1934.
- Friesen, J. W. *Characteristics of Mennonite identity: A survey of Mennonite and non-Mennonite views*. *Canadian Ethnic Studies*, 1971, 3, 25-41.
- Friesen, J. W. *Intercultural education: Its ground, emphases, and challenge*. *Journal of Teacher Education*, 1972, 23, 177-182.
- Friesen, J. W. *Preparation of teachers for native students*. *Canadian Society for the Study of Education 1974 Yearbook*, 56-64.
- Gerbrandt, H. J. *Adventure in faith*. Altona, Manitoba: D. W. Friesen and Sons Ltd., 1970.
- Gingrich, O. *The Amish of Canada*. Waterloo, Ont.: Conrad Press, 1972.
- Gross, P. S. *The Hutterite way*. Saskatoon Sask.: Freeman Publishing Company, 1965.
- Harder, M. S. *The origin, philosophy, and development of education among the Mennonites*. Unpublished Doctoral dissertation, University of Southern California, Los Angeles, 1949.
- Harder, S. L. *Mennonites along the Peace*. A series of six articles dealing with Mennonite life in Northern Alberta. *The Canadian Mennonite*, 1965, Nov. 9 to Dec. 28.
- Hershberger, G. F. *The Mennonite church in the second world war*. Scottdale, Pa.: Mennonite Publishing House, 1951.

- Hiebert, C. *The Holdeman people: The Church of God in Christ, Mennonite, 1859-1969*. South Pasadena, Calif.: William Carey Library, 1973.
- Heidebrecht, H. V. *Values of Mennonite youth in Alberta*. Unpublished Master's thesis, The University of Calgary, 1973.
- Horsch, J. *The Hutterian brethren 1528, 1931*. Goshen, Ind.: Mennonite Historical Society, 1931.
- Hostetler, J. A. Hutterite separation and public tolerance. *The Canadian Forum*, 1961, 41, April, 11-13.
- Hostetler, J. A. Socialization and adaptations to public schooling: The Hutterian brethren and old order Amish. *Sociological Quarterly*, 1970, 2, November, 194-205.
- Hostetler, J. A., & Huntington, G. E. *The Hutterites in North America*. New York: Holt, Rinehart & Winston, 1967.
- Klassen, A. J. Mennonite brethren confessions of faith: Historic roots and comparative analysis. Unpublished S.T.M. thesis, Union College of British Columbia, Vancouver, 1965.
- Klassen, P. G. A history of Mennonite education in Manitoba. Unpublished Master's thesis, University of Manitoba, Winnipeg, 1958.
- Klassen, P. G. A history of Mennonite education in Canada—1786-1960. Unpublished Doctoral thesis, University of Toronto, 1970.
- Klassen, W. *Anabaptism: Neither Catholic nor Protestant*. Waterloo: Conrad Press, 1974.
- Knill, W. D. The Hutterites: Cultural transmission in a closed society. *Alberta Historical Review*, 1968, 16, 1-10.
- Mann, G. A. Functional autonomy among English school teachers in the Hutterite colonies of southern Alberta: A study of social control. Unpublished Doctoral dissertation, The University of Colorado, Boulder, 1974.
- Palmer, H. Responses to foreign immigration: Nativism and ethnic tolerance in Alberta 1880-1920. Unpublished Master's thesis, University of Alberta, Edmonton, 1971.
- Palmer, H. *Land of the second chance: A history of ethnic groups in southern Alberta*. Lethbridge: The Lethbridge Herald, 1972.
- Peters, V. *All things common: The Hutterian way of life*. Minneapolis: The University of Minnesota Press, 1965.
- Sanders, D. E. The Hutterites: A case study in minority rights. *The Canadian Bar Review*, 1964, 42, 225-242.
- Sawatsky, A. The Mennonites of Alberta and their assimilation. Unpublished Master's thesis, University of Alberta, Edmonton, 1964.
- Smith, C. H. *The story of the Mennonites* (Rev. ed.). Newton, Kansas: Mennonite Publication office, 1957.
- Toews, J. A. *Alternative service in Canada during World War II*. Winnipeg: The Christian Press, 1959.
- Toews, J. A. *A history of the Mennonite Brethren Church*. Hillsboro, Kansas: Mennonite Brethren Publishing House, 1975.
- Toews, J. B. *Lost fatherland: The story of the Mennonite emigration from Soviet Russia, 1921-1927*. Scottdale, Pa.: Herald Press, 1967.

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Perceptions of Parents, Teachers and Administrators to Parental Involvement in Early Childhood Programs

A sample of 24 teachers and 36 administrators who were involved with kindergarten programs in the Edmonton Public School system, together with 87 parents of children in the same programs, responded to two forms of a questionnaire in which they were asked to rate the frequency of occurrence of parental involvement in specific tasks. One form of the questionnaire sampled actual parental involvement while the other form sampled preferred parental involvement. The responses were analyzed and the results indicated differences between the parental group and the teacher and administrator groups as well as differences between actual and preferred ratings of parental involvement. All three groups perceived less actual than preferred parental involvement in certain types of parental involvement tasks. Parents were by no means unanimous in preferring more parental involvement than they perceived they actually had at present. (Dr. Jackson is Associate Professor in the Department of Elementary Education, University of Alberta; Ms. Stretch is Assistant Principal at J. A. Fife Elementary School.)

Early childhood programs have tended in the last few years to place increasing emphasis upon parental involvement. Indicative of this trend in the province of Alberta is the statement of the Early Childhood Services Branch of the Government of Alberta.

The involvement and cooperation of parents and community agencies in the decision-making processes which affect vital areas of their own, and their children's lives is strongly endorsed (Government of Alberta, 1973, p. 18). This trend is not limited to Alberta, however, and is being felt throughout North America.

In spite of the trend towards greater involvement of parents in early childhood programs, relatively little research has examined the perceptions of parents, teachers and administrators towards parental involvement. Consequently it was the purpose of this study to examine the perceptions of three groups—parents, teachers and administrators—towards the ways in which parents are actually being involved in an early childhood (kindergarten) program and the perceptions of the same three groups towards the preferred ways in which parents should be involved in the same program.

Research Procedures

This study was carried out in Edmonton, Alberta, Canada during April and May of 1975 in the schools of the Edmonton Public School Board. The principal data gathering instrument consisted of a series of questionnaires.

Design of the Instrument

In order to ascertain the perceptions of the three groups—parents, teachers and administrators—towards parental involvement, it was decided that a questionnaire technique would be employed. To adequately sample perceptions of the groups towards parental involvement, it was necessary to examine the possible types of involvement that parents could have in early childhood programs in order to comprehensively reflect all aspects of potential parental involvement. A number of authors and researchers (Gordon, 1970; Hess, Block, Costell, Knowles & Largen, 1971; Calvert, 1971; Datta, 1973; Schmerber, 1974; Wood, 1974) have attempted to categorize the various types of possible parental involvement. As a result of a review of the literature and a series of parental interviews, it was decided that, for the purposes of this research, parental involvement could be categorized into five types.

- (1) Parents as recipients and supporters:
Parental involvement that focuses upon parents participating as passive recipients of information from the school.
- (2) Parents as educators and learners:
Parental involvement that focuses upon parents participating by teaching the child at home and becoming interested in learning about the child, the school, and the program.
- (3) Parents as non-instructional volunteers:
Parental involvement that focuses upon parents participating in non-instructional, clerical kinds of support tasks.
- (4) Parents as instructional volunteers:
Parental involvement that focuses upon parents participating by assuming responsibility in actual classroom activities under the direction of a teacher.
- (5) Parents as decision makers:
Parental involvement that focuses upon parents participating by assuming a partnership role in the school and making decisions, alone or in conjunction with other groups, regarding the development, implementation and evaluation of early childhood programs.

On the basis of the above five-part category system as well as a series of interviews with selected parents, specific tasks were generated which were

considered to reflect a particular type of parental involvement and to reflect realistically the pragmatics of an ongoing school program. Eight tasks were selected from those generated for each of the five categories. The research instrument therefore consisted of forty parental involvement tasks which reflected equally each of the five types of parental involvement described above. The tasks were randomly distributed throughout the instrument. Each respondent was required to read each task carefully and to react to each of the tasks by seeking a response along a continuum of five possible choices—very much, much, somewhat, little, none. The five choices measured the degree of parental involvement perceived by the respondent for each of the parental involvement tasks. The respondents were required to complete the forty-item questionnaire twice. The first responses were to indicate the actual involvement of parents in the present kindergarten program in terms of the selected tasks. The second responses were to indicate the ways in which the respondent preferred parents to be involved in early childhood education programs in terms of the selected tasks.

The Sample

The respondents selected for this study were parents, teachers and administrators involved in kindergarten programs in twenty-three schools in the Edmonton Public School System. The sample consisted of teachers, principals and assistant principals in all twenty-three schools and five parents selected randomly from class lists in each of the schools. The researcher personally delivered and collected the questionnaires from each of the schools. Questionnaires were sent to parents through the kindergarten child. All parents had been telephoned and informed of the coming questionnaire and asked for their participation. All of the 36 administrators and 24 teachers returned valid questionnaires while 75% of the 115 parents did likewise.

Results of the Study

After the data were compiled, analysis was first undertaken to examine possible differences between the perceptions of actual and preferred parental involvement within each of the groups. Means and standard deviation were computed and the means compared through t-tests; the results appear in Tables 1, 2, and 3.

It may be seen from Table 1 that significant differences ($p < .01$) exist between the parents' perceptions of actual and preferred parental involvement for all five types of tasks. In the case of types 1 and 2, parents perceived significantly more actual than preferred involvement with these types of tasks. In the case of the remaining three types of tasks, parents perceived less actual than preferred involvement in these tasks.

Table 2 shows that no significant difference occurred in the teachers' perceptions of actual and preferred parental involvement for type 1 tasks. For the remaining four types of tasks, teachers perceived significantly less ($p < .01$) actual than preferred parental involvement in each of the four types of parental involvement tasks.

As seen in Table 3, administrators' perceptions of actual parental involvement in type 1 tasks differed significantly ($p < .05$) from their

TABLE 1
PARENTS' PERCEPTIONS OF PARENT INVOLVEMENT—ACTUAL AND
PREFERRED

Actual Involvement						Preferred Involvement					
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
Means	28.1	23.6	13.5	12.2	11.4	22.2	20.6	24.2	23.4	24.4	
Standard Deviation	6.5	4.3	4.6	3.9	5.6	6.1	7.1	7.1	7.4	7.6	
t-test Values for Means											
Actual	Preferred				t	df	Prob.				
Variable (1) with Variable (1)					7.728	86	0.0000				**
Variable (2) with Variable (2)					4.244	86	0.0001				**
Variable (3) with Variable (3)					-12.901	86	0.0000				**
Variable (4) with Variable (4)					-14.809	86	0.0000				**
Variable (5) with Variable (5)					-13.675	86	0.0000				**
Significant:			Types: (1) Parents as recipients and supporters								
* .05 level			(2) Parents as learners and educators								
** .01 level			(3) Parents as non-instructional volunteers								
			(4) Parents as instructional volunteers								
			(5) Parents as decision makers								

TABLE 2
TEACHERS' PERCEPTIONS OF PARENT INVOLVEMENT—ACTUAL AND
PREFERRED

	Actual Involvement					Preferred Involvement					
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
Means	28.6	22.5	19.2	18.9	18.5	27.2	29.0	31.3	31.4	32.3	
Standard Deviation	6.4	4.8	4.2	5.0	4.4	6.3	7.1	7.4	7.5	8.0	
t-Test Values for Means											
Actual	Preferred				t	df	Prob.				
Variable (1) with Variable (1)					0.853	23	0.4023				N.S.
Variable (2) with Variable (2)					-4.253	23	0.0003				**
Variable (3) with Variable (3)					-8.110	23	0.0000				**
Variable (4) with Variable (4)					-11.380	23	0.0000				**
Variable (5) with Variable (5)					-8.179	23	0.0000				**
Significant:			Types: (1) Parents as recipients and supporters								
* .05 level			(2) Parents as learners and educators								
** .01 level			(3) Parents as non-instructional volunteers								
			(4) Parents as instructional volunteers								
N.S. Not significant			(5) Parents as decision makers								

perceptions of preferred parental involvement in these same tasks. Administrators perceived more actual involvement in type 1 tasks than preferred involvement of parents in this type of task. For each of the four remaining types of parental involvement tasks, administrators perceived significantly less ($p < .01$) actual than preferred parental involvement in these types of tasks.

In summary, the results indicate that all three groups perceived significantly less ($p < .01$) actual than preferred parental involvement for

TABLE 3
ADMINISTRATORS' PERCEPTIONS OF PARENT INVOLVEMENT—ACTUAL
AND PREFERRED

Actual Involvement						Preferred Involvement				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
Means	27.5	21.7	19.9	17.6	20.5	25.6	27.0	29.8	28.3	29.3
Standard Deviation	5.2	4.6	5.2	4.2	4.3	3.2	4.3	4.3	4.9	5.1

t-Test Values for Means					
Actual	Preferred	t	df	Prob.	
Variable (1) with Variable (1)		2.164	35	0.0373	*
Variable (2) with Variable (2)		-5.679	35	0.0000	**
Variable (3) with Variable (3)		-9.648	35	0.0000	**
Variable (4) with Variable (4)		-9.700	35	0.0000	**
Variable (5) with Variable (5)		-7.927	35	0.0000	**

Significant:	Types:	(1) Parents as recipients and supporters
* .05 level		(2) Parents as learners and educators
** .01 level		(3) Parents as non-instructional volunteers
		(4) Parents as instructional volunteers
		(5) Parents as decision makers

parental involvement tasks types 3, 4, and 5. The results for parental involvement tasks types 1 and 2 differed from group to group. Parents perceived significantly more ($p<.01$) actual than preferred parental involvement with type 2 tasks while teachers and administrators perceived significantly less ($p<.01$) actual than preferred parental involvement with the same type of parental involvement tasks. While parents perceived significantly more ($p<.01$) actual than preferred parental involvement with type 1 tasks, teachers' perceptions did not differ significantly whereas administrators' perceptions of actual and preferred involvement differed significantly ($p<.05$).

The second major thrust of the analysis was to determine possible differences in the perceptions of the actual and preferred parental involvement in terms of the five types of parental involvement tasks between the three groups. Means and standard deviations for each of the groups were calculated and compared by means of the Scheffé multiple

TABLE 4
COMPARISON OF RESPONSES FOR ACTUAL INVOLVEMENT AT TYPE (1)
PARENTS AS RECIPIENTS AND SUPPORTERS

Group	Number	Mean	S.D.
Teachers	24	28.6	6.5
Administrators	36	27.5	5.3
Parents	87	28.1	6.5
Total	147	28.1	6.2

$p = .8; \quad F = 0.22 \text{ (df } 2,144)$

comparison of means procedure. The results of this analysis appear in Tables 4 through 13.

Table 4 presents the means and standard deviations for the three groups in response to actual parental involvement in type 1 tasks. A one-way analysis of variance to determine potential differences between the groups indicated no significant differences.

TABLE 5
COMPARISON OF RESPONSES FOR PREFERRED INVOLVEMENT AT TYPE (1)
PARENTS AS RECIPIENTS AND SUPPORTERS

Group	Number	Mean	S.D.
Teachers	24	27.2	6.4
Administrators	36	25.6	3.2
Parents	87	22.2	6.1
Total	147	23.9	5.9
$p = 0.00; \quad F = 10.00 \text{ (df } 2,144)$			
Probability Matrix for the Scheffé Multiple Comparison of Means (Preferred Involvement--Parents as Recipients and Supporters)			
Group	1	2	3
Teachers	1.0000		
Administrators	0.5619	1.0000	
Parents	0.0007**	0.0095*	1.0000
Significant:			
* .05 level			
** .01 level			

Table 5 presents the means and standard deviations for the three groups in response to preferred involvement of parents in type 1 tasks. The Scheffé probability matrix indicates significant differences ($p < .01$) between the perceptions of parents and those of both teachers and administrators to preferred parental involvement in type 1 tasks with parents preferring less involvement than teachers or administrators in this type of parental involvement task.

Tables 6 and 7 present the results of similar analysis of parent, teacher and administrator responses to actual and preferred involvement of parents in type 2 tasks. The results of the analysis are similar to those for type 1 parental involvement tasks. There were no significant differences

TABLE 6
COMPARISON OF RESPONSES FOR ACTUAL INVOLVEMENT AT TYPE (2)
PARENTS AS LEARNERS AND EDUCATORS

Group	Number	Mean	S.D.
Teachers	24	22.5	4.9
Administrators	36	21.7	4.6
Parents	87	23.6	4.4
Total	147	22.9	4.5
$p = .11; \quad F = 2.24 \text{ (df } 2,144)$			

TABLE 7
COMPARISON OF RESPONSES FOR PREFERRED INVOLVEMENT AT
TYPE (2)—PARENTS AS LEARNERS AND EDUCATORS

Group	Number	Mean	S.D.
Teachers	24	29.0	7.3
Administrators	36	27.0	4.3
Parents	87	20.6	7.2
Total	147	23.5	7.5
$p = 0.0; \quad F = 21.68 \text{ (df 2,144)}$			

Probability Matrix for the Scheffé Multiple Comparison of Means
(Preferred Involvement--Parents as Learners and Educators)

Group	1	2	3
Teachers	1.0000		
Administrators	0.5156	1.0000	
Parents	0.0000**	0.0000**	1.0000

Significant:

- * .05 level
- ** .01 level

between the three groups in their perceptions of actual involvement in type 2 tasks. However, parents differed significantly ($p<.01$) from both teachers and administrators in their perceptions of preferred parental involvement in type 2 tasks with parents preferring less involvement in this type of task than teachers or administrators.

The analysis of responses of the three groups to type 3 tasks (Tables 8 and 9) indicated a change from the analysis performed for the first two types of parental involvement tasks. Parents now differed significantly

TABLE 8
COMPARISON OF RESPONSES FOR ACTUAL INVOLVEMENT AT TYPE (3)
PARENTS AS NON-INSTRUCTIONAL VOLUNTEERS

Group	Number	Mean	S.D.
Teachers	24	19.2	4.3
Administrators	36	19.9	5.2
Parents	87	13.5	4.6
Total	147	16.0	5.6
$p = 0.0; \quad F = 30.11 \text{ (df 2,144)}$			

Probability Matrix for the Scheffé Multiple Comparison of Means
(Actual Involvement--Parents as Non-Instructional Volunteers)

Group	1	2	3
Teachers	1.0000		
Administrators	0.8637	1.0000	
Parents	0.0000**	0.0*	1.0000

Significant:

- * .05 level
- ** .01 level

TABLE 9
COMPARISON OF RESPONSES FOR PREFERRED INVOLVEMENT AT
TYPE (3)—PARENTS AS NON-INSTRUCTIONAL VOLUNTEERS

Group	Number	Mean	S.D.
Teachers	24	31.3	7.5
Administrators	36	29.8	4.3
Parents	87	24.2	7.4
Total	147	26.7	7.4
$p = 0.0; \quad F = 14.76 \text{ (df 2,144)}$			
Probability Matrix for the Scheffe Multiple Comparison of Means (Preferred Involvement--Parents as Non-Instructional Volunteers)			
Group	1	2	3
Teachers	1.0000		
Administrators	0.7092	1.0000	
Parents	0.0001**	0.0003**	1.0000
Significant:			
* .05 level			
** .01 level			

from both teachers ($p < .01$) and administrators ($p < .01$) in their perceptions of the actual involvement of parents in type 3 tasks in an ongoing kindergarten program with parents perceiving less actual involvement. As well, parents still differed significantly ($p < .01$) from both teachers and administrators in their perceptions of preferred parental involvement in type 3 tasks with parents expressing a preference for less involvement in this type of task.

The analysis of the responses of the three groups to type 4 tasks (Tables 10 and 11) illustrates the continuation of the trend seen with type 3 tasks.

TABLE 10
COMPARISON OF RESPONSES FOR ACTUAL INVOLVEMENT AT TYPE (4)
PARENTS AS INSTRUCTIONAL VOLUNTEERS

Group	Number	Mean	S.D.
Teachers	24	18.9	5.1
Administrators	36	17.6	4.3
Parents	87	12.2	4.0
Total	147	14.6	5.1
$p = 0.0; \quad F = 34.52 \text{ (df 2,144)}$			
Probability Matrix for the Scheffé Multiple Comparison of Means (Actual Involvement--Parents as Instructional Volunteers)			
Group	1	2	3
Teachers	1.0000		
Administrators	0.5587	1.0000	
Parents	0.0*	0.0*	1.0000
Significant:			
* .05 level			
** .01 level			

TABLE 11
COMPARISON OF RESPONSES FOR PREFERRED INVOLVEMENT AT
TYPE (4)—PARENTS AS INSTRUCTIONAL VOLUNTEERS

Group	Number	Mean	S.D.
Teachers	24	31.4	7.6
Administrators	36	28.3	5.0
Parents	87	23.4	7.3
Total	147	25.9	7.5
$p = 0.0; \quad F = 15.62 \text{ (df 2,144)}$			

Probability Matrix for the Scheffé Multiple Comparison of Means
(Preferred Involvement--Parents as Instructional Volunteers)

Group	1	2	3
Teachers	1.0000		
Administrators	0.2542	1.0000	
Parents	0.0000**	0.0018**	1.0000

Significant:

* .05 level

** .01 level

Parents differed significantly ($p<.01$) from both teachers and administrators in their perceptions of the actual involvement of parents in type 4 tasks in an ongoing kindergarten program with parents perceiving less actual involvement. As well, parents differed significantly ($p<.01$) from both teachers and administrators in their perception of preferred parental involvement in type 4 tasks with parents expressing a preference for less involvement in this type of task than either of the other two groups.

Finally, the analysis of the responses of the three groups to type 5 tasks,

TABLE 12
COMPARISON OF RESPONSES FOR ACTUAL INVOLVEMENT AT TYPE (5)
PARENTS AS DECISION MAKERS

Group	Number	Mean	S.D.
Teachers	24	18.5	4.5
Administrators	36	20.5	4.3
Parents	87	11.4	5.6
Total	147	14.8	6.6
$p = 0.0; \quad F = 45.53 \text{ (df 2,144)}$			

Probability Matrix for the Scheffé Multiple Comparison of Means
(Actual Involvement - Parents as Decision Makers)

Group	1	2	3
Teachers	1.0000		
Administrators	0.3410	1.0000	
Parents	0.0000**	0.0*	1.0000

Significant:

* .05 level

** .01 level

TABLE 13
COMPARISON OF RESPONSES FOR PREFERRED INVOLVEMENT AT
TYPE (5)—PARENTS AS DECISION MAKERS

Group	Number	Mean	S.D.
Teachers	24	32.3	8.1
Administrators	36	29.3	5.1
Parents	87	24.4	7.7
Total	147	26.9	7.8
$p = 0.0; \quad F = 14.11 \text{ (df 2,144)}$			

Probability Matrix for the Scheffé Multiple Comparison of Means
(Preferred Involvement - Parents as Decision Makers)

Group	1	2	3
Teachers	1.0000		
Administrators	0.2983	1.0000	
Parents	0.0000**	0.0031**	1.0000

Significant:

* .05 level

** .01 level

as indicated in Tables 12 and 13, extends the trends developed in response to type 2 and type 3 tasks. Parents differed significantly from teachers ($p<.01$) and administrators ($p<.05$) in their perceptions of the actual involvement of parents in type 5 tasks in an ongoing kindergarten program with parents perceiving less involvement. As well, parents differed significantly ($p<.01$) from both teachers and administrators in their perception of preferred parental involvement in type 5 tasks with parents perceiving less involvement in this type of task than either teachers or administrators.

Summary and Discussion

In summary, the results seem to indicate that all three groups perceived less actual parental involvement than they would prefer for certain types of parental involvement tasks—parents as non-instructional volunteers, parents as instructional volunteers, and parents as decision-makers. Thus while parental involvement in early childhood programs is currently being espoused, such involvement may yet be more apparent than real for certain types of tasks. However, parents are by no means unanimous in preferring more involvement than they perceive they actually have at present. The results for parental involvement tasks types 1 and 2—parents as recipients and supporters, and parents as learners and educators—indicate that parents prefer less involvement in these types of tasks than they perceive they currently have. Thus, from the parents' point of view, it may be that involvement in a variety of tasks is more desirable than a great deal of involvement in certain tasks with little involvement in other types of parental involvement tasks.

An examination of differences between the three groups in their perceptions of actual and preferred parental involvement in the five types of tasks indicated considerable differences between the groups. In all instances where significant differences occurred, the differences were

between the parent group on the one hand and the two professional educator groups on the other. Significant differences never occurred between the teacher group and the administrator group. Thus it would appear that, while professional educators share a common perception about parental involvement in early childhood programs, that perception is not necessarily congruent with the perception held by the parents themselves.

Another interesting finding was that in all instances where significant differences occurred between the parent group and the other two groups, it was the parent group that perceived less actual preferred involvement. In no case did the parent group perceive a significantly greater amount of actual or preferred involvement than the teacher or administrator groups. Thus, professional educators seem to perceive greater amounts of actual or preferred parental participation in early childhood programs than do parents at the present time.

Undoubtedly the issue of parental involvement in early childhood programs will continue in the future and program designers and implementers will continue to try to involve parents in school programs. The results of the present study seem to indicate that professional educators need to be cognizant of the possibility that their perceptions of parental involvement in early childhood programs may not be congruent with the perceptions of those very parents they are trying to involve.

References

- Calvert, R. D. Dimensions of family involvement in early childhood education. *Exceptional Children*, 1971, 37, 655-659.
- Datta, L. E. *Parent involvement in early childhood education: A perspective from the United States*. Washington: National Institute of Education, 1973.
- Gordon, I. J. *Parent involvement in compensatory education*. (ERIC clearinghouse on early childhood education). Illinois: University of Illinois Press, 1970.
- Government of Alberta. Operational plans for early childhood services. The Government of Alberta, March, 1973.
- Hess, R. D., Block, M., Costell, D., Knowles, R. T., & Largen, D. Parent involvement in early education. In E. Grotberg (Ed.), *Day care: Resource for decisions*. Washington: Office of Economic Opportunity, 1971.
- Schmerber, R. J. Reaching parents through involvement. *Elementary School Guidance and Counselling*, 1974, 9, 138-142.
- Wood, A. J. Some effects of involving parents in the curriculum. *Trends in Education*, 1974, 35, 39-45.

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The Effects of Senior Students as Teacher Aides With Special Reference to Teaching Behaviour

This study of 28 grade 2 to 6 teachers assigned teacher aides compared their teaching behaviour to those of 28 like teachers without aides in a before-and-after design. Teaching behaviour was measured by the Indicators of Quality (IOQ) Scale which yielded 8 scores. For only grade 4, 5, and 6 teachers was there any suggestion that the presence of an aide enhanced those behaviours measured by only the IOQ Creativity score. For administrative purposes, however, it was concluded that the presence of a teacher aide in the classroom did not result in change in observable teacher behaviours nor difference from those of like teachers without aides. (Dr. Black is a Professor in the Department of Educational Psychology, The University of Calgary; Mr. Bunyan is Coordinator of Elementary Education, Calgary R.C. Separate School Board; Ms. Black is with the Edmonton Public School Board.)

One of the most frequently stated claims for the use of teacher aides in the classroom is that this will permit better teaching (e.g., Emmerling & Chavis, 1966, p. 175). Conant (1971) has established that the presence of aides in an elementary classroom increases teacher instruction time from 92 to 109 minutes daily (p. 3) and reduces routine work time from 144 to 127 minutes (p. 33). However, better teaching by teachers could also be manifested in better preparation or more carefully planned classroom management techniques. Either of the two possibilities should result in some change in teaching behaviour from that which existed before aides were introduced. Surprisingly, there is little published research to support

or refute these claims. The topic is not even mentioned in the *Second Handbook of Research on Teaching* (Travers, 1973).

This study sought to examine this issue in the elementary school and involved twenty-eight teachers and their aides in three experimental schools and twenty-eight teachers in four control schools. The distribution of this sample by grades is reported in Table 1.

TABLE 1
DISTRIBUTION OF EXPERIMENTAL AND CONTROL SAMPLES BY GRADE

Grade	Division One		Division Two			Total
	2	3	4	5	6	
Control (C)	5	5	6	6	6	28
Experimental (X)	5	5	6	6	6	28
Total	10	10	12	12	12	56

Seven schools in the Calgary Separate School system were used in this study. The schools were selected in three areas of the city near three senior high schools which supplied the aides. All aides were grade twelve students. The schools were chosen on the basis of size and, more importantly, the control school was chosen such that its attendance area had the same socioeconomic status as the matched experimental school. Usually, the two areas adjoined one another. In one instance, however, to meet the “adjoining socioeconomic status” criterion, two smaller schools were used and paired with the experimental school. Within each school not more than two teachers were selected for each grade and these were chosen at random. Split grade classes were excluded. In the two smaller schools, only one teacher per grade per school was selected at random for inclusion in this study. Grade one teachers were excluded on the grounds that the teaching behaviour in this grade is so manifestly different from the other five elementary grades as to make any comparison a tenuous thing at best.

The study design was of the before-and-after type. The pre-observations of teacher behaviour took place in very early February before the aides were introduced. However, each teacher had had the class since the start of school in September. The post-testing took place four months later, in late May. Observation was by seven trained observers and was randomized, both by observer and occurrence, which was in one of four time periods during the Tuesday, Wednesday or Thursday morning. Each teacher in each round was observed at least twice at different times by a different observer in each observation. In 44 instances of the 112 observations, a third observation by a third observer was made simultaneously with one other. As a result of consultation with the teachers all observations were confined to mornings because (i) the aides were always present; (ii) this was the period the teachers found the aides to be most useful; and finally, (iii) this was the period when the “core” of academic subjects is traditionally taught, and this would give a modest measure of curricular uniformity to the observations.

To measure behaviour, the observers used the *Indicators of Quality*

Scale, an instrument published and scored by the Institute of Administrative Research (I.A.R.), Teachers' College, Columbia University, New York. The scale consists of fifty-one polarized statements of behaviour or signs which the observer notes as being present or not present in a given observation period. Seventeen of the items relate to teacher behaviour, another seventeen to pupil behaviour, and a final seventeen to teacher-pupil interaction.

From these fifty-one items four additional scores, Individualization, Interpersonal Regard, Group Activity and Creativity, are obtained. These four scores are based on selected items taken from each of the preceding three item constellations. Individualization scores are based on items referring to the degree to which the teacher has adjusted her instruction to class needs of the individual pupils during the observation period. These items included such concepts as knowledge of pupils, physical facilities and arrangements, different tasks and communication, such as the modification of questioning to suit the pupil. Interpersonal Regard scores relate primarily to the affective side of pupil-teacher relationships. These items include such signs as demeanour, patience, pupil involvement, respect, physical movement, pupil involvement and error behaviour. Group Activity items reflect such things as physical arrangement, decision making, group goal setting, role distribution, consensus, intercommunications and conflict resolution. Creativity scores include such concepts as time for thinking, skills of thinking, testing ideas, opportunity for speculation, unusual ideas, question and answer techniques, abundance of materials and so on.

The *Indicators of Quality Scale*, while not reported in Buros (1972), is referred to extensively, both in development and use, in the *I.A.R. Bulletins*. The instrument has been used in connection with studies of classroom variables affecting the quality of teaching, such as class size. However, at the time of this study, this was the first time the scale had been used in the fashion reported here. The best description of the purpose of the *Indicators of Quality Scale* is that of its designer, W. S. Vincent (1972):

In the case of Indicators, the intention was to produce a pure measure of process, uncontaminated by input items. The intention was almost completely realized. Virtually the entire focus of the instrument is on the behavior of teachers and pupils. Thus it is an independent criterion and the effects of input upon this criterion may be analyzed in order to study the relation of inputs, singly and in combination, with school quality. (p. 2)

The fifty-one items of the instrument have their basis in forty concepts deemed to be critical in the identification of quality teaching as reported in the literature and as agreed upon by an array of acknowledged experts in the appropriate areas. Martin (1972) reports that, for grade six at least, both teacher and pupil perceptions of good and poor teaching are in agreement with the score reported on the IOQ Scale. Much the same findings for teacher perceptions alone are also reported by Ledford (1971).

Scoring of the Scale is done by the publisher, and is based on a count of the presence of positive and negative signs. The Associate Director of the Institute of Administrative Research, Dr. M. N. Olson, besides citing Casey (1971), noted in private correspondence that other non-published research

has confirmed that the most reliable scores were obtained by subtracting the number of negative signs from the sum of positive signs for each score. This is referred to as the Mean Difference Score (MDS). It was these MDS scores that were used in this study. Finally, although as noted above there were multiple observations of each teacher in each round, the scoring procedures of I.A.R. are such that only a single composite score was reported for each teacher during each round. It was argued that this enhances the reliability of the reported observations.

Because of the nature of the IOQ Scale, the observers must be trained particularly in the description and classifications of teaching behavior. The seven observers in this study¹ were trained initially in a three-day workshop conducted by Dr. Olson before the study began and again in a one-day refresher workshop in mid-May before the final round of observations.

For this study, four hypotheses, all in null form, were developed that were applicable to all eight IOQ scores for the total and divisions one and two sub-samples. These were as follows:

- (1) The pre-test scores of the control school teachers (CX) will not differ except by chance factors in sampling from the pre-test scores of the experimental school teachers (XX), i.e., $CX = XX$.
- (2) The pre-test scores of the control school teachers (CX) will not differ other than by chance from their post-test scores (CY), i.e., $CX = CY$.
- (3) The pre-test scores of the experimental school teachers (XX) will not differ from their post-test scores (XY) except by chance, i.e., $XX = XY$. (Secondary hypothesis (H_1): $XY > XX$.)
- (4) The post-test scores of the control school teachers (CY) will not differ from those of the experimental school teachers (XY) except by chance factors, i.e., $XY = CY$. (Secondary hypothesis (H_1): $XY > CY$.)

To test these hypotheses for divisions one and two and total samples, in turn, two approaches were used. First, using the means and standard deviations for each variable, the conventional "t" test was performed as appropriate for correlated (Hypotheses 2 and 3) and uncorrelated scores (Hypotheses 1 and 4). In the event that Hypothesis 3 or 4 was rejected, the particular data were then subjected to a one-tailed test to examine the secondary hypothesis (H_1), namely, that the experimental school teachers would obtain higher scores than the control school teachers.

A second series of tests was conducted which examined only the direction of change in scores from pre- to post-testing. As before, the null hypothesis was struck for each of the eight scores by level for each of the control and experimental samples. It stated that any change in scores from pre- to post-testing, whether it be higher (+), the same (0) or lower (-), would be no different from that expected by chance alone. The Sign Test (Siegel, 1956, pp. 68-72) was used in this analysis of the hypotheses $C(+) = C(-)$ and $X(+) = X(-)$. The third hypothesis in this series, again in null form, stated that the direction of changes in scores between the control and experimental groups could be attributed to chance factors, i.e., $C(+) = X(+)$. The conventional chi-squared test corrected for contingency (Siegel, 1956, pp. 107-109) was used. However, in this case "direction" was given to the data in that all cases reporting no gain were cast in with those reporting lower scores on the post-testing. Although not reported, the same data were also

TABLE 2
MEANS AND STANDARD DEVIATIONS OF TOTAL AND SUB-SCORES AND
CORRELATION COEFFICIENTS BETWEEN PRE- AND POST-TESTING WITH
INDICATORS OF QUALITY SCALE AND DIRECTION OF CHANGE OF SCORES
FROM PRE- TO POST-TESTING FOR DIVISION ONE TEACHERS

	All Items		Teacher Items		Pupil Items		Teacher-Pupil Items		Individualization		Inter-Personal Regard		Group Activity		Creativity	
	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-
Control Group (c) N = 10	Mean 13.00 S.D. 2.45 r .14	14.80 2.79 1.14	11.65 0.74 .18	12.30 1.33 1.21	11.10 1.14 .01	11.15 1.21 1.05	10.75 1.15 1.14	11.35 1.14 1.14	11.25 1.25 .50	11.30 1.14 1.14	11.55 1.15 .11	12.95 1.86 1.11	10.85 0.84 -.28	11.30 1.21 1.15	10.15 1.42 .15	10.60 0.99 1.57
Experimental (X) N = 10	Mean 14.15 S.D. 3.08 r .84	14.75 4.46 1.84	11.80 1.54 .71	12.50 1.97 1.27	11.15 0.74 .65	10.95 1.27 1.05	11.20 1.58 .70	11.30 1.89 1.14	11.35 1.61 .24	11.90 1.81 1.14	11.95 1.56 .91	12.35 2.15 1.11	11.10 0.94 .90	10.85 1.73 1.15	10.85 1.61 .57	10.85 1.57 1.15
Hypothesis Tested	$\overline{CX} = \overline{XX}$ $\overline{CX} = \overline{CY}$ $\overline{XY} = \overline{XY}$ $\overline{XY} = \overline{CY}$	---** --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---	--- --- --- ---
Control Group (c) N = 10	(+)* (0) (-)	7 - 3	6 2 2	5 1 4	5 1 4	7 - 3	5 - 3	5 - 3	5 - 3	5 - 3	7 - 3	6 1 3	6 1 3	6 1 3	6 - 4	6 - 4
Experimental (X) N = 10	(+) (0) (-)	5 1 4	7 - 3	4 - 6	4 - 6	5 2 3	5 2 3	6 1 3	6 1 3	6 1 3	6 1 3	6 1 3	6 1 3	6 1 3	5 2 3	5 2 3
Hypothesis Tested	$C(+)=C(-)$ $X(+)=X(-)$ $C(+)=X(-)$	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---	--- --- ---

* (+) - Number of cases with pre-test (X) scores higher than post-test (Y) scores
(0) - Number of cases with pre-test (X) scores the same as post-test (Y) scores
(-) - Number of cases with pre-test (X) scores lower than post-test (Y) scores
** - Indicates Hypothesis is not rejected because no statistically significant difference was found, et seq.

TABLE 3
MEANS AND STANDARD DEVIATIONS OF TOTAL AND SUB-SCORES AND
CORRELATION COEFFICIENTS BETWEEN PRE- AND POST-TESTING WITH
INDICATORS OF *QUALITY* SCALE AND DIRECTION OF CHANGE OF SCORES
FROM PRE- TO POST-TESTING FOR DIVISION TWO TEACHERS

	All Items	Teacher Items		Pupil Items		Teacher-Pupil Items		Individualization		Inter-Personal Regard		Group Activity		Creativity	
		Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-
Control Group (C) N = 18	Mean	14.33	13.94	11.94	11.92	10.75	10.44	11.64	11.36	12.14	11.94	11.11	11.00	10.94	10.61
	S.D.	2.67	3.47	1.49	0.79	1.13	1.72	0.64	1.52	1.08	1.24	1.01	1.67	1.31	1.37
	r	.17		.55		.45		-.29		-.12		.22		.37	
Experimental (X) N = 18	Mean	13.56	14.56	11.78	12.17	10.81	10.92	10.97	11.47	12.39	12.31	10.86	10.75	10.17	11.17
	S.D.	3.21	4.84	1.39	2.33	1.36	1.33	1.42	1.87	1.65	2.29	1.64	1.80	1.63	1.60
	r	.30		.08		.04		.32		.13		.11		.26	
Hypothesis Tested	$\overline{CX} = \overline{XX}$	---		---		---		---		---		---		---	
	$\overline{CY} = \overline{Y}$	---		---		---		---		---		---		---	
	$\overline{XX} = \overline{XY}$	---		---		---		---		---		---		Reject (5%)*	
	$XY = \overline{CY}$	---		---		---		---		---		---		---	
Control Group (C) N = 18	(+)	6		8		6		7		8		7		7	
	(0)	1		3		2		2		-		-		2	
	(-)	11		7		10		9		10		11		9	
Experimental (X) N = 18	(+)	11		10		6		10		8		6		12	
	(0)	-		2		3		1		1		3		2	
	(-)	7		6		9		7		9		9		4	
Hypothesis Tested	$C(+) = C(-)$	---		---		---		---		---		---		---	
	$X(+) = X(-)$	---		---		---		---		---		---		Reject (5%)	
	$C(+) = X(-)$	---		---		---		---		---		---		---	

*Secondary Hypothesis (H_i), $\overline{XY} > \overline{XX}$, is not rejected at this level of confidence, et seq.

TABLE 4
MEANS AND STANDARD DEVIATIONS OF TOTAL AND SUB-SCORES AND
CORRELATION COEFFICIENTS BETWEEN PRE- AND POST-TESTING WITH
INDICATORS OF QUALITY SCALE AND DIRECTION OF CHANGE OF SCORES
FROM PRE- AND POST-TESTING FOR ALL TEACHERS

	All Items	Teacher Items		Pupil Items		Teacher-Pupil Items		Individu- alization		Inter- Personal Regard		Group Activity		Creativity			
		Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-	Pre-	Post-		
Control Group (C) N = 28	Mean	13.86	14.25	11.84	12.05	10.88	10.70	11.14	11.36	11.27	11.21	11.93	12.30	11.02	11.11	10.66	10.61
	S.D. r	2.64 .14	3.25 .14	1.24 .35	1.10 .30	1.10 .30	1.55 .30	1.12 .13	1.37 .13	1.12 .28	1.22 .28	1.13 -.09	1.58 .04	0.92 .04	1.51 .04	1.38 .26	1.22 .26
Experi- mental (X) N = 28	Mean	13.77	14.63	11.79	12.19	10.93	10.93	11.05	11.41	10.96	11.48	12.23	12.32	10.95	10.79	10.41	11.05
	S.D. r	3.18 .48	4.70 .48	1.42 .28	1.20 .18	1.20 .18	1.32 .18	1.50 .46	1.87 .46	1.82 .36	1.86 .36	1.66 .40	2.26 .40	1.40 .26	1.75 .26	1.67 .36	1.64 .36
Hypothesis Tested	$\overline{CX} = \overline{XX}$	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	$\overline{CX} = \overline{CY}$	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	$\overline{XX} = \overline{XY}$	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	$\overline{XY} = \overline{CY}$	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Control Group (C) N = 28	(+)	13	14	14	11	14	11	14	14	11	11	15	15	13	13	13	13
	(0)	1	5	5	3	2	3	2	4	4	4	--	--	1	1	2	2
	(-)	14	9	9	14	12	14	12	13	13	13	13	13	14	14	13	13
Experi- mental (X) N = 28	(+)	16	17	17	10	15	10	15	15	16	16	14	14	9	9	17	17
	(0)	1	2	2	3	3	3	3	3	3	3	2	2	7	7	4	4
	(-)	11	9	9	15	10	15	10	10	9	9	12	12	12	12	7	7
Hypo- thesis Tested	$C(+)=C(-)$	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	$X(+)=X(-)$	---	---	---	---	---	---	---	---	---	---	---	---	---	---	Reject (5%)	Reject (5%)
	$C(+)=X(+)$	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

tested with the tied (0) scores cast out as in the Sign Test. These results did not differ from those found using the above procedure of grouping.

The summary statistics and the results of testing the hypotheses are reported in Tables 2, 3 and 4 for divisions one and two and all teachers, respectively.

Findings

The findings of this study can be quickly summarized:

- (1) No statistically significant differences in all pre-test scores were found between the control and experimental school teachers.
- (2) No statistically significant differences were found between the pre- and post-test scores of all eight variables for the control and experimental school teachers, with two exceptions. Division two experimental school teachers' Creativity score changes were more likely to increase from pre- to post-testing than could be attributed to chance factors in sampling alone. Moreover, the mean difference in scores for the same variable and group was found to be significant. Second, because of this difference in division two teacher Creativity scores, the total group gain difference was also found to be statistically significant.
- (3) It having been established in Hypothesis 1 that any pre-test differences between the control and experimental school teachers' scores that were found could be attributed to chance factors, it was subsequently found on all variables that the two groups' post-test scores did not differ from one another other than in that which could be attributed to chance factors.

Conclusions and Comments

Given the limitations of the *Indicators of Quality* Scale, the size of the sample of teachers, the randomness of the morning observations of teaching and of classes, and the reliability of the observers themselves, there is no evidence, with one possible exception, to suggest that the availability of a teacher aide to each teacher in grades two to six will result in any observable difference in the teaching behavior of such teachers from those who do not have aides.

The exception was the division two experimental school teachers' Creativity scores. The findings of this study revealed that such scores were more likely to increase from pre- to post-testing in the experimental group than could be attributed to chance. This difference could be explained on the basis that in the conduct of such a large number of statistical tests, the likelihood that at least one difference would be found to be statistically significant is quite high. This one finding must also be viewed in the context that, notwithstanding this directional gain from one group, there remained no statistically significant difference between the control and experimental school division two teachers on this variable, either in score gain or in post-test scores. It is noted that this one statistical difference in score gains in the division two subsample also resulted in the total teacher sample difference being significant.

It can be concluded that, for administrative purposes within the limitations of this study, the presence of a teacher aide in each classroom did not result in any observable difference in teacher classroom behaviour

from that employed by teachers without aides. As to why no change occurred, the answer may lie in the earlier observations of Brickell (1964) and Gross, Giacquinta and Bernstein (1968) that when teachers are given freedom to depart significantly from their established routines, to guide and direct their own activities, and to otherwise alter their work situation through the use of aides, they typically fail to depart significantly from their established routines. The present study would add that they do not change their teaching styles, either.

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References

- Brickell, H. M. State organization for educational change. In M. B. Miles (Ed.), *Innovation in education*. New York: Bureau of Publications, Teachers' College, Columbia University, 1964.
- Buros, O. K. (Ed.). *The seventh mental measurements yearbook*. Highland Park, N.J.: The Gryphon Press, 1972.
- Casey, J. J. Reliability measures of Indicators of Quality. *I.A.R. Research Bulletin*, 1971, 11 (3), May.
- Conant, E. H. *A cost-effectiveness study of employment of non-professional teaching aides in public schools*. Final report, Project #O.E.8-0481. Bureau of Research, Office of Education, U.S. Department of Health, Education and Welfare. Washington, D.C.: U.S. Printing Office, 1971.
- Emmerling, F. C., & Chavis, N. Z. The teacher aide. *Educational Leadership*, 1966, 24 (2), 175-183.
- Gross, N., Giacquinta, J. B., & Bernstein, M. *An attempt to implement a major educational innovation: A sociological inquiry*. Report #5, Center for Research and Development on Educational Differences. New Haven, Conn.: Harvard University Press, 1968.
- Ledford, R. K. Teacher role perception as a function of performance. *I.A.R. Research Bulletin*, 1971, 12 (1), November, 4-6.
- Martin, S. M. Relation of pupil perception to scores in Indicators of Quality. *I.A.R. Research Bulletin*, 1972, 12 (3), May, 1-3.
- Siegel, S. *Nonparametric statistics for the behavioral sciences*. New York: McGraw-Hill Book Company, 1956.
- Travers, R. M. W. (Ed.). *Second handbook of research on teaching*. Chicago: Rand McNally College Publishing Company, 1973.
- Vincent, W. S. The quality inventory: A schedule of input variables as a guide to self-appraisal. *I.A.R. Research Bulletin*, 1972, 12 (2), February, 1-4.

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Need for Structure, Program Openness and Job Satisfaction Among Teachers in Open Area and Self-Contained Classrooms

Thirty-six teachers in open area classrooms and 49 teachers in self-contained classrooms completed measures of job satisfaction, need for structure and program openness. Analysis of variance was used to assess the significance of relationships between need for structure, program openness and type of facility as reflected in job satisfaction. There was no difference in program openness between open area and self-contained classrooms. Teachers in self-contained classrooms had significantly higher job satisfaction than those in open areas and teachers reporting open programs had significantly higher job satisfaction than teachers reporting closed programs. However, in both cases these differences were due to the scores of those with low need for structure. (Dr. Allen is Director of Professional Programs in the Faculty of Education; Mr. Hamelin is a school principal and Mr. Nixon is a vice-principal in the Vancouver School District. Both are graduate students in the Faculty of Education.)

Numerous studies and reports (e.g., Open Space Project Bulletin, 1970; Allen, 1973) refer to claims that open area classrooms offer advantages for informal teaching methods such as flexible grouping, team teaching and individualizing instruction. It has also been widely assumed by teachers, administrators and researchers that teachers preferring more formal and traditional approaches to instruction will be better suited to conventional self-contained classrooms.

But in spite of these claims, evidence is conflicting. Jeffries (1971) and Lueders-Salmon (1972) found greater student activity and more individualization and small-group work in open space classrooms and Myers (1971) found open area students to be more autonomous than others in self-contained classrooms. However, Deibel (1972) found that individualization was not being achieved in open space classrooms and Warner (1971) found no significant differences between open area and self-contained classrooms

on a number of variables. In reviewing these and other studies, Martin and Pavan (1976) concluded that open space does not of itself result in real differences in learning or teaching and that innovative practices can exist in more traditional buildings.

Although some research has been done on relationships between cognitive style and school program (Hunt, 1971, 1974) there has been little systematic investigation of these variables in open area classrooms.

Most comparative research in this field has ignored variations in program openness in open area and in self-contained classrooms, making it extremely difficult to attribute results to the type of facility, the program, or to interactions of these with personality characteristics of teachers or students. In spite of this, many schools now being built include both open area and self-contained classrooms in the belief that some teachers and some students are "suited" to open areas and some are not. If this suitability can be reliably predicted it may be that teachers and students should be matched with appropriate types of program and facilities so that their personality style, the program, and the physical environment will be compatible rather than in conflict.

This study was designed to examine relationships between program openness, teachers' need for structure and type of school facility (open area or self-contained classroom). Teachers' job satisfaction was used as the dependent variable. It was predicted that teachers with low need for structure would have higher job satisfaction in relatively open programs, and in open area classrooms. Teachers with high need for structure would have greater job satisfaction in self-contained classrooms, and in relatively closed programs. It was assumed that learning would be enhanced if the school system attempted to place teachers in positions in which they were able to work effectively, and from which they would derive a high level of job satisfaction.

Method

Forty-nine teachers in self-contained classrooms and 36 teachers in open area classrooms volunteered to participate in the study. All of the teachers came from 19 elementary schools which contained both open area and self-contained classrooms. The schools were in the Vancouver and Burnaby school districts in British Columbia.

The subjects completed three test instruments: a Job Satisfaction Index (Brayfield and Rothe, 1951), O. J. Harvey's Conceptual Systems Test (Harvey & Hoffmeister, 1971), and the Teacher Questionnaire (Evans, 1971; Walberg & Thomas, 1971). The Teacher Questionnaire was used as a measure of program openness, and the Need for Structure Sub-scale of the Conceptual Systems Test was used as a measure of need for structure.

Scores on the Teacher Questionnaire (Program Openness) were ranked and divided into upper and lower halves. Those in the upper half were referred to as open programs, those in the lower half as closed programs. Scores on the Need for Structure scale were similarly ranked and the sample divided into two halves representing teachers with high need for structure and teachers with low need for structure.

It was hypothesized that there would be no significant differences in job satisfaction scores between teachers with high and low need for structure,

in open area or self-contained classrooms, with either closed or open programs. The hypothesis was tested with two-way analysis of variance with differences accepted as significant at the .05 confidence level.

When an overall significant difference was found, additional comparisons were made among the groups using the LSD procedure for multiple range tests (Kirk, 1968) to determine which combinations of variables resulted in significant differences in job satisfaction.

To determine the overall effects of the major variables, job satisfaction scores of subjects scoring in the upper and lower thirds of the teacher questionnaire and of the conceptual systems test were compared using one-way analysis of variance. Job satisfaction scores of teachers in open area and self-contained classrooms were compared in the same manner. In these comparisons also, differences were accepted as significant at the .05 confidence level.

Results

A summary of the results relating to the major hypothesis is shown in Table 1. A number of significant differences were found and the hypothesis was rejected.

TABLE 1
MEAN JOB SATISFACTION SCORES FOR TEACHERS WITH HIGH AND LOW NEED FOR STRUCTURE OFFERING OPEN AND CLOSED PROGRAMS IN OPEN AREA AND SELF-CONTAINED CLASSROOMS

	Closed Program		Open Program	
	Open Area	Self-Contained	Open Area	Self-Contained
Low Need for Structure	N = 6 71.33	N = 16 77.94	N = 10 74.20	N = 11 82.18
High Need for Structure	N = 7 75.86	N = 13 74.54	N = 11 77.73	N = 8 78.75

$p < .05$

Teachers in self-contained classrooms (N=48) had significantly higher job satisfaction scores (78.08) than teachers in open area classrooms (75.17; N=34; $p < .05$). However, the results shown in Table 1 suggest that the differences could be entirely explained by variations in scores for teachers with low need for structure.

Teachers reporting open programs had significantly higher job satisfaction scores than teachers reporting closed programs [Upper third (N=31): 78.81. Lower third (N=28): 74.75; $p < .05$]. In these comparisons also, the effect could be attributed to those with low need for structure (see Table 1).

When the multiple range test was used to test the significance of the differences in mean job satisfaction scores in various cells, no significant differences were found among teachers with high need for structure. Among teachers with low need for structure, those in self-contained classrooms had higher job satisfaction scores than those in open areas whether programs were open or closed; in both open area and self-contained classrooms, teachers with open programs had higher job satisfaction than teachers in closed programs.

There were no overall differences between teachers with high and low need for structure. However, as Table 1 indicates, there were some consistent tendencies which might well be investigated in further studies even though the differences were not significant at the .05 level on the multiple range test. Teachers in open area classrooms with high need for structure had higher job satisfaction scores than teachers in open area classrooms with low need for structure. Teachers in self-contained classrooms with high need for structure had lower job satisfaction scores than teachers in self-contained classrooms with low need for structure.

Discussion

In spite of the relatively small size of the sample, this study suggests a number of clear and consistent relationships between need for structure, program openness and type of classroom. These may be summarized as follows:

- (a) Teachers with low need for structure derive greater job satisfaction in self-contained classrooms than in open areas.
- (b) Teachers with low need for structure derive greater job satisfaction in open than in closed programs.
- (c) Teachers with low need for structure are affected to a much greater extent than teachers with high need for structure by type of classroom and nature of program. They have their highest job satisfaction when working with an open program in a self-contained classroom, and their lowest job satisfaction when working with a closed program in an open area.

This casts further doubt on the general claims of advantages of open areas for informal teaching methods. On the other hand, it was noted that there was very little difference between open area and self-contained classrooms on program openness. The mean score on the teacher questionnaire for open areas was 140.07 compared with 139.65 for self-contained classrooms. These figures should be compared with mean scores on the same instrument of 160.80 and 167.17 for British and American "open" programs and of 117.46 for American "closed" programs in a study conducted by Evans (1971). This raises the question of whether teachers have been adequately prepared to use the instructional procedures for which open areas are supposed to have been designed. It is possible that if these procedures were understood and used, job satisfaction in open area classrooms might be higher.

Another possible explanation for the relatively low job satisfaction among open area teachers with low need for structure is that they may have difficulty in situations which require careful coordination and teaming. This interpretation would be consistent with their higher job satisfaction scores in self-contained classrooms where creative teaching and last minute decisions would not interfere with the activities of others.

These interpretations and the results themselves must be considered in the light of several factors which limit their generalizability. First, the sample was not large and consisted of volunteers from only two school districts in the lower mainland of British Columbia. Second, the sample was relatively homogeneous on Program Openness and the results may

well have been different with a wider distribution of scores. These two limitations suggest the desirability of replicating the study with a somewhat wider sample. Third, job satisfaction should not be taken as a direct indicator of the quality of children's education, although there are some grounds for believing it may be related. Fourth, the results relate to the schools as they are presently operating and not to their potential. It is quite possible, for example, that open area classrooms might yield higher job satisfaction if teachers received special training in the teaching techniques for which they are supposed to be designed.

References

- Allen, D. I. *Correlates of teachers' perceptions of success in open area schools*. Vancouver: Report No. 76-3, Educational Research Institute of British Columbia, 1973.
- Brayfield, A. H., & Rothe, H. F. An index of job satisfaction. *Journal of Applied Psychology*, 1951, 35, 307-311.
- Deibel, R. F. An investigation of factors in creating and utilizing open space elementary schools. Ph.D. Dissertation, Ohio State University, 1971. Dissertation Abstracts International, 1972, 32, 6261A.
- Evans, J. T. Characteristics of open education: Results from a classroom observation rating scale and a teacher questionnaire. Newton, Mass.: Educational Development Center, 1971.
- Harvey, O. J., & Hoffmeister J. K. *Conceptual Systems Test*. Boulder, Colorado: Test Analysis and Development Corporation, 1971.
- Hunt, D. E. *Matching models in education: The coordination of teaching methods with student characteristics*. Toronto: Ontario Institute for Studies in Education, 1971.
- Hunt, D. Teachers' adaptation to students: From implicit to explicit matching. Toronto: Ontario Institute for Studies in Education, 1974.
- Jeffries, J. S. An investigation of the effects of innovative educational practices on pupil-centeredness of observed behaviors and on learner outcome variables. Dissertation Abstracts International, 1971, 31, 5766A.
- Kirk, R. *Experimental design: Procedures for the behavioral sciences*. Belmont, Calif.: Brooks, 1968.
- Lueders-Salmon, E.A.M. Team teaching and the "active" classroom: A comparative study of the impact of team-teaching schools on classroom "activity". Ph.D. Dissertation, Stanford University, 1972. Dissertation Abstracts International, 32, 6686A.
- Martin, L. S., & Pavan, B. N. Current research on open space, nongrading, vertical grouping, and team teaching. *Phi Delta Kappan*, 1976, 57 (5), 310-315.
- Myers, R. E. Comparison of the perceptions of elementary school children in open area and self-contained classrooms in British Columbia. *Journal of Research and Development in Education*, 1971, 4, 100-106.
- Open Space Project Bulletin*, School Planning Laboratory, Stanford University, No. 1, 1970.
- Walberg, H. J., & Thomas, S. C. *Characteristics of open education: Towards an operational definition*. Newton, Mass.: TDR Associates, Inc., Contract No. DEC-1-71-062805-3936, 1971.
- Warner, J. B. A comparison of students' and teachers' performances in an open area facility and in self-contained classrooms. Ph.D. Dissertation, University of Houston, 1971. Dissertation Abstracts International, 31, 5105A.

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Auditory Discrimination and Nonstandard Dialect: A Newfoundland Example

Two sets of word pairs were produced, one set (DH) consisting of pairs which were contrasts in their standard pronunciation but which were homonyms in their dialect form, the other set (DC) consisting of pairs which were contrasts in both forms. These were then administered as an auditory discrimination task to a group of 48 dialect-speaking first graders and to a group of 48 standard English-speaking grade one pupils. For both groups the DC items were discriminated significantly better than the DH items. However, the difference scores (DC-DH) of the dialect-speaking subjects were significantly greater than those of the control group. It was concluded that dialect speech did interfere with the auditory discrimination of standard English speech sounds. (Dr. Walker is Assistant Professor of Education, Mount St. Vincent University, Halifax.)

Life in a Newfoundland outport fishing village would seem to be the very antithesis of life in an American inner-city. Yet two educationally relevant parallels appear to exist: in both there is a concern about a low level of reading skill development and in both a distinctive nonstandard dialect of English is spoken. Currently, if one can judge from educational literature, many educators are intrigued by the possibility that, in the case of inner-city black children, there exists a causal relationship between the two factors. The present study involving one aspect of the relationship between the two factors in a Newfoundland setting, is reported here in the hope that, as well as being a small contribution to the study of reading education in one part of a Canadian province, it may help confirm and generalize some research findings that have resulted from the study of black dialect.

Auditory Discrimination and Nonstandard Dialect

In spite of a rather large volume of research into the effects of black dialect on learning to read, the hypothesis that this particular nonstandard dialect interferes with the process of learning to read has received little

empirical support. Inverse correlations between reading achievement and density of dialect usage in speech were revealed in studies by Gross (1967 in Hunt, 1974-5), Johnson (1970) and Wiggins (1970), but the nature of this relationship remains unclear. Other studies have failed to demonstrate an interference effect from dialect upon oral reading, either in the case of black dialect (Simons & Johnson, 1974) or in the case of the Newfoundland dialect (Walker, 1975), while similar results have been obtained in studies involving reading comprehension (Melmed, 1970; Hall & Turner, 1974). These results do not contradict the conclusions of Labov (1972) that the effects of black dialect are not structural interference in learning to read but rather the expression of a wider cultural conflict between black, inner-city children and the middle class values of their schools. However, the findings of these studies perhaps indicate that research should shift its focus from the investigation of relationships between dialect and the larger components of reading such as oral reading and comprehension. It might be more productive to search for the mechanisms by which nonstandard dialect speech could impede the acquisition of reading skills, through an exploration of its effects upon underlying auditory, visual and linguistic skills related to aspects of the reading process.

One such underlying skill is auditory discrimination, the ability to perceive differences between speech sounds, which has been shown to be significantly related to reading achievement (Dykstra, 1966). This perceptual ability underlies the learning of decoding skills through the phonics component of a reading program. Phonics refers to the relationships between letters or letter combinations and the phonemes of a language. To learn phonics as a functional word recognition strategy is a matter of learning to associate the appropriate phoneme category with a particular letter or letter combination as it is encountered in an unfamiliar printed word. Phonemes appear to have no definitive physical identity, but are rather psychological categories which include a range of phonetic variations. For example, the phoneme category /p/ includes the different allophones of /p/ that occur in the words "pot" "spot" and "stop". Also, since each phoneme is the result of a particular pattern of articulatory activity, some phonemes are distinguished from each other by quite small articulatory differences as are, for example, /b/ and /p/ merely by the presence or absence of voicing. As a result of this somewhat arbitrary nature of the phonemic system, it cannot be assumed that, because a child can use oral language effectively, phonics is simply a matter of matching a known sound with an unfamiliar letter; it may be a matter of having to learn the conventional phoneme categories by learning to distinguish one from another, followed by the association of these newly-identified auditory categories with appropriate graphemic symbols. In this sense, auditory discrimination as a developmental skill is a prerequisite for successful phonics learning.

There is evidence that the ability to distinguish speech sounds is a function of the pattern of phonemes that are used in the listener's own speech production (Lado, 1961, p. 14). Theoretically this would arise from the fact that a person's phoneme categories, derived from his usual speech environment, serve his own speech production and act as a filter through which the speech of others is perceived. Speaking of the question of how

perceptual mechanisms cope with speech signals, Cooper (1972) wrote: "The central theme of most current attempts to answer that question is that perception somehow borrows the machinery of production" (p. 36). This theoretical position would predict that people would have difficulty perceiving contrasting phonemes in a language or dialect if they did not possess the same set of contrasts in their own speech production. For example, a speaker who did not contrast the pronunciation of "deaf" and "death," because in his speech /f/ and /θ/ belonged to a single phoneme category, would predictably have difficulty hearing the difference between these two words as spoken by a standard English speaker. Consequently one mechanism of dialect interference in learning to read may lie in the relationships between dialect phonology, auditory discrimination of standard English speech sounds, and phonics learning.

Some research shows that black dialect speech impedes the ability to auditorily discriminate sounds of standard English speech. Melmed (1970) designed a task to measure auditory discrimination in a sample of grade 3 students, some of whom were black dialect speakers and some standard English speakers. Each word of pairs of dialect homonyms like "toe" and "told" was illustrated by a picture. The subject was required to select one picture in response to a spoken sentence containing one of the pair of homonyms. It was found that there was a significant difference between the two groups favouring the standard English speakers, indicating that the black children made a greater number of auditory discrimination errors. The conclusion from this study was that black dialect speech did interfere with auditory discrimination of standard English speech. Gottesman (1972) reached a similar conclusion from her study of a sample of black grade one children. She used a minimal pairs test containing two kinds of contrasts: pairs which were contrasts in both standard English and black dialect and pairs which were contrasts in standard English but homonyms in black dialect. The findings were that black dialect speakers had significantly lower scores than standard English speakers on the dialect homonym pairs, but that there were no differences on the pairs that were contrasts in both dialects. Hutchinson (1972) deleted items from an auditory word discrimination test which she felt were prejudicial to black dialect speakers. She claimed that these deletions raised the grade scores of black students who took the test. However, Karlsen (1972), one of the original authors of the test in question, disputed Hutchinson's findings. He later collaborated on a study of black children's ability to discriminate words ending in consonant clusters which are subject to reduction in black dialect speech (Karlsen & Blocker, 1974). The findings were reported as indicating no interference from black dialect on auditory discrimination of this feature in standard English speech.

A Study of Dialect and Auditory Discrimination in Newfoundland

As far as black dialect is concerned the evidence seems to indicate that nonstandard dialect speech can interfere with the ability to distinguish between certain sounds as they occur in standard English pronunciation. The present study was an attempt to secure data relevant to this question as it applies to another nonstandard dialect, that spoken in one part of the province of Newfoundland, Canada.

As a result of historical and geographical factors, a distinctive regional dialect of English is spoken in parts of this province, and the dialect has been studied and described as it currently survives in selected communities (Paddock, 1966; Noseworthy, 1971) and in selected areas (Paddock, personal communication.) The phonological, grammatical, and lexical features of this dialect can be discerned in the speech of many school children, especially those in more isolated, rural communities. A dialect is defined as one variety of a language which is distinguished by certain formal characteristics from other varieties of the same language (Hasan, 1973). These formal characteristics are phonological, grammatical, and lexical features which correlate in a non-causal manner with extralinguistic geographical or social factors. The dialect involved in this study is the variety of English spoken in the area of the northeast coast of Newfoundland. It is referred to as "nonstandard" in the sense that it contrasts in certain definable, formal ways with the variety of English which is generally spoken by educated, influential people in Newfoundland society. However, the two terms "nonstandard dialect of the northeast coast of Newfoundland" and "standard English" are used as rather broad generalizations. Within each, further variations according to community and social class may be present. Also, dialect usage varies within an individual's speech as a function of style which in turn is dependent on variables present in the communication situation. As a result, any one nonstandard speaker, like any other speaker, has a range of speech styles, some of which may be quite saturated with features of the nonstandard dialect and some of which possess relatively few such features. This complexity of dialect usage, both between and within individual speakers, which was not controlled for in this study should be recognized as a limitation.

Selected phonological features of the dialect¹

The strategy of the study was to devise an auditory discrimination task using two kinds of minimal pairs: pairs that were contrasts in standard English but homonyms in the local dialect (DH) and pairs that were contrasts in both the dialect and standard English (DC). The DH pairs were derived from selected phonological features of the dialect which distinguish it from standard English. Some of these features are rules which apply widely within the phonological system, while others appear to be restricted in their application to particular sets of lexical items.

1. *Consonant neutralization*

- a. interdental fricatives /θ/ and /ð/ become alveolar stops /t/ and /d/ respectively producing homonym pairs of "thick" - "tick", "both" - "boat", "then - den", and "lather" - "ladder."
- b. segmental /h/ does not function as a phoneme in the dialect. It may be omitted from words like "house" and "holy", and for what are probably suprasegmental reasons it may appear at the beginning of words like "ice" and "apple". As a result "howl" and "owl" would not be distinguished in the dialect.

2. *Dependent vowel neutralization before /r/.*

- a. the high back vowel /uw/ becomes a mid back vowel /ʌ/ so that "moor" and "more" are homonyms in the dialect.

- b. the high front vowel /iy/ becomes a mid front vowel /e/ so that “beer” and “bare” are homonyms.
 - c. the low back vowel /ɔ/ becomes a low front unrounded vowel /æ/ especially when /r/ is followed by a nasal as in “born”, “form” and “morning”. This produces the homonyms “born” - “barn”.
3. *Dependent vowel neutralization before /l/.*
- a. the high back lax vowel /u/ becomes a high back tense vowel /uw/ in some words producing the homonyms “pull” and “pool”.
 - b. the high front lax vowel /I/ becomes a high front tense vowel /iy/ in some words. This results in the homonym pair “fill” and “feel”.
 - c. the mid front long diphthong /ey/ becomes a mid front short steady vowel /e/ in some words resulting in a homonym pair “sail” and “sell”.
 - d. the high front lax vowel /I/ becomes a mid front lax vowel /e/ in some words resulting in the homonym pair “will” and “well”.
4. *Independent vowel neutralization*
- a. the low and mid diphthongs /ɔy/ and /ay/ become /ɛy/ resulting in homonyms of “boy” and “by”.
 - b. in some words the high back lax vowel /u/ becomes a mid back lax vowel /ʌ/. As a result “look” and “luck” are homonyms.
 - c. the mid front lax vowel /e/ becomes a high front lax vowel /I/ in most phonetic contexts. As a result “mess” and “miss” are homonyms.

Auditory Discrimination Test

Each of the 15 DH items listed above as examples was paired with a DC item which was similar in terms of a number of phonemes and type of auditory contrast except that the contrasts applied to the dialect pronunciation as well as to standard English pronunciation. (Both sets of items are shown in Table 1.) A fourth set of 10 identical pairs of words (P) was drawn up and the total of 40 pairs (DH, DC, and P) was then randomly ordered and taperecorded by a female standard Canadian English speaker. The two words in each pair were spoken once in a distinct voice with an intervening one-second pause. The tape recording was tested with two adolescent piano students whose auditory discrimination ability was felt by their teacher to be well developed. Each one correctly identified the pairs that were the same and different so that it was clear that the 30 items intended as contrasts in standard English were indeed distinguishable as recorded.

Sample

Ninety-one grade one children from six elementary schools in the Carmanville and Fogo districts of the Terra Nova Integrated School Board were tested. Employment in the area is mainly provided by the inshore fishing industry, logging, and small local service industries. These homogeneous and stable communities are small and isolated especially in Fogo which is an island linked by a daily ferryboat to the mainland and maintaining a total population of some 6,000 people. Of the 91 children tested, a small number were excluded because of hearing or articulation

defects, two were excluded because they had been born outside the district, while a considerable number were excluded because they failed to reach a criterion of nine correct identifications of the ten P items in the test. It was felt that children who made more than one error on the identical pairs were not presenting a reliable auditory discrimination performance. After these exclusions the final sample consisted of 48 children, by chance 24 girls and 24 boys. This sample represented the "dialect group."

The design of the study required a control group of standard English-speaking children. The source of this control group was defined as the population of grade one children attending schools within the city of St. John's who had been born in an English-speaking province outside Newfoundland or in an English-speaking country outside Canada. A total of 71 such children was tested. Five were eliminated from the sample through failure to achieve nine out of ten on the P items of the test. From the balance a random selection of 24 girls and 24 boys was made for a total of 48 subjects. Generally speaking, the socioeconomic level of the control group's background was higher than that of the experimental dialect-speaking group. This control sample is referred to as the "standard English group."

Data collection

The test was administered to small groups of six to eight children at a time using spare rooms or space in the schools. The group administration required the use of an answer sheet in the form of "happy faces" and "sad faces", one each per test item. The children were asked to mark the happy face if they heard two words that sounded the same and the sad face if they heard two words that sounded different. The test items were preceded by four practice items. A pilot study had indicated that almost all children appeared to enjoy the task and appeared to have no difficulty with the testing format. The data were collected from both groups in the month of March, 1975, by the present writer.

Hypotheses

1. There will be no significant difference between the auditory discrimination scores of the dialect group on DH and DC items.
2. There will be no significant difference between the auditory discrimination scores of the standard English group on DH and DC items.
3. There will be no significant difference between the auditory discrimination scores of boys and girls in the dialect group on either DH or DC items.

The major interest of the study was in hypothesis 1. However, it was necessary to show that the two sets of items on the auditory discrimination test were of equivalent difficulty in all respects other than their dialect base. Hypothesis 2 was designed to serve this purpose since the absence of significant differences between the two scores of the control group would indicate equivalent discriminability of DH and DC items and would indicate confidence that any observed difference under the first hypothesis could be attributable solely to the independent variable, dialect. The data were analyzed statistically using two-way analysis of variance with repeated measures, sex x dialect.

Findings

Hypothesis 1 stated that there would be no significant difference between the DH and DC scores of the 48 subjects in the dialect group. With a possible score of 15 in each case, the DC mean was 12.06 with a standard deviation of 1.60 and the DH mean was 7.67 with a standard deviation of 2.24 ($F = 239.99$; $df = 1.46$; $p < .00001$). The first hypothesis was rejected.

Hypothesis 2 stated that there would be no significant difference between the DH and DC scores of the 48 subjects in the standard English group. In this case the DC mean was 14.10 with a standard deviation of 1.31 and the DH mean was 12.56 with a standard deviation of 2.44 ($F = 38.82$; $df = 1.46$; $p < .0001$). The second hypothesis was also rejected.

Hypothesis 3 referred to sex differences in the dialect group. In the case of both DC and DH items the means were very close — boys: DC = 12.50, DH = 7.46; girls: DC = 12.71, DH = 7.88 ($F = .43$; $df = 1.46$; $p < .51$). The third hypothesis was not rejected.

TABLE 1
DISCRIMINABILITY OF DH AND DC PAIRS DERIVED FROM SELECTED
PHONOLOGICAL FEATURES OF THE NONSTANDARD DIALECT OF THE
NORTHEAST COAST OF NEWFOUNDLAND

phonological feature	homonym pair	A. D. error score		contrast pair	A. D. error score	
		Dialect SE			Dialect SE	
1. $\theta \rightarrow t$	thick tick both boat	12 46	3 20	tick Dick road wrote	8 13	1 2
2. $\gamma \rightarrow d$	then den lather ladder	23 45	2 15	den ten rubber rudder	10 47	4 20
3. $h \leftrightarrow zero$	howl owl	33	2	owl fowl	6	1
4. $uw \rightarrow \Lambda/--r$	moor more	37	28	tar tore	6	0
5. $iy \rightarrow e/--r$	beer bare	34	9	wear wire	4	0
6. $\text{ɔ} \rightarrow \text{æ}/--r$ in some words	born barn	13	0	born burn	5	0
7. $u \rightarrow uw/--l$ in some words	pull pool	35	12	pull pill	2	1
8. $I \rightarrow iy/--l$ in some words	fill feel	13	1	feel fail	11	2
9. $ey \rightarrow e/--l$ in some words	sail sell	11	0	sell seal	3	0
10. $I \rightarrow e/--l$ in some words	will well	23	5	fell file	2	1
11. $\begin{Bmatrix} \text{ɔy} \\ \text{ay} \end{Bmatrix} \rightarrow \text{əy}$	boy by	10	0	bay boy	2	0
12. $u \rightarrow \text{ʌ}$ in a few words	look luck	5	0	luck lock	14	5
13. $e \rightarrow I$ in most words	mess miss	22	5	moss mess	1	0

Since the rejection of the second hypothesis indicated that the two sets of items on the test were not of equivalent difficulty, the DH items being apparently intrinsically more difficult than the DC items, a further hypothesis was tested. This stated that the difference between the DC and DH scores of the dialect group was not significantly greater than the differences between the DC and DH scores of the standard English group. One subject from each group had to be eliminated to test this comparison because of DH scores that were higher than their DC scores. For the great majority of subjects, the difference favoured the DC scores while for a small number the two scores were equal. It is recognized that this analysis was weaker than desirable since using the difference between two scores would tend to compound any errors of measurement. This hypothesis was tested using two-way analysis of variance, sex $\times$ dialect. The mean difference score for the dialect group (DC - DH) was 5.05 and for the standard English group, it was 1.55 ($F = 81.04$; $df = 1,90$; $p < .0001$). This supplementary hypothesis was, therefore, rejected. The effect due to sex was not significant ($F = .02$).

Examination of the two sets of scores on the individual DH items showed considerable variation between the discriminability of different pairs of dialect homonyms. This information in the form of total error scores by the dialect and standard English groups is contained in Table 1. It seemed that the "both" - "boat", "then" - "den", "lather" - "ladder", "moor" - "more", "beer" - "bare", "pull" - "pool", "well" - "will", and "mess" - "miss" pairs produced the highest number of discrimination failures in the dialect group. In the case of the "both" - "boat", "lather" - "ladder", and "moor" - "more" pairs, a considerable number of the standard English group also failed to make the discrimination. The "look" - "luck" pair was discriminated by almost everyone in the dialect group and several other pairs produced relatively low error scores. Among the DC items the "rubber" - "rudder" pair proved to be a difficult contrast to distinguish, all but one of the dialect group failing as well as a large number of the subjects in the standard English group. All other DC items were well discriminated by the standard English group, while a few produced relatively high error scores in the dialect group.

Discussion

Clearly the grade one children living in this rural area of Newfoundland were able to auditorily discriminate pairs of words that were homonyms in their dialect less easily than pairs of words that were contrasts in their dialect. To some extent this was probably due to the fact that these dialect homonyms as a group were more difficult to discriminate than the set of dialect contrasts used in the study. However, the magnitude of the difference between the scores of these children on the two sets of pairs, together with the fact that this difference was significantly greater than that between the scores of the standard English group, can safely be regarded as evidence of an interference effect from a nonstandard dialect on the auditory discrimination ability of the sample employed in this study. The findings support those of Melmed (1970) and Gottesman (1972) that a similar relationship existed in the case of black dialect.

However, the pattern of error scores on the test items showed that

dialect does not operate on auditory discrimination in isolation from other factors such as perhaps the acoustic differences involved in the sounds to be discriminated. When acoustic differences are small as in the case of “both” - “boat”, “lather” - “ladder”, and “beer” - “bare”, dialect appears to have a strong screening effect on auditory discrimination. In cases like “look” - “luck” and “sail” - “sell”, the acoustic difference in standard pronunciation is perhaps great enough to counteract the dialect screen. The conclusion of this study should be modified to acknowledge that, while a general interference effect from this Newfoundland dialect appears to operate on grade one children’s ability to distinguish sounds which are not contrasted in their own speech, this interference interacts with other factors such as, perhaps, intrinsic acoustic similarity. Thus the interference effect is not uniform, but applies more strongly to some contrasts than to others.

Implications

The significance of the finding is that first of all it is an indication that the effects of dialect on auditory discrimination are not specific to one nonstandard dialect, namely black dialect, but apparently generalizable to other dialects whose phonology diverges from that of standard varieties of speech. Secondly, the fact that distinctive phonological features of the Newfoundland dialect can act as a screen preventing the perception of certain sound differences between pairs of words presented in isolation is of some importance at least to primary teachers of nonstandard Newfoundland dialect-speaking children. It may well be that some such children are being taught that some letters have one sound and other letters have another, whereas, in fact, the sounds are the same to the children. Such might be the case for /θ/ and /t/ or /ʒ/ and /d/. It may also be that some children are being required to learn the short sounds of “a”, “e”, and “i”, examples of sounds which, in their speech, do not consistently signal contrasting morphemes in the same way that they do in standard English dialects. In other words, if phonics is taught within a standard English phonological framework, it should not be assumed that nonstandard dialect speakers in Newfoundland are in all cases being simply required to match an unknown letter with a known and distinctive sound. It may well be that the teaching of certain sensitive phonics elements should be preceded by a considerable amount of listening activities to promote auditory discrimination so as to avoid potential confusion and frustration. For the northeast coast of Newfoundland this study has indicated which elements appear to be most sensitive in this respect.

Another implication arising from these findings applies to the use of standardized auditory discrimination tests in Newfoundland and presumably in other areas where a distinctive dialect is spoken. Considerable caution ought to be exercised in the interpretation of scores obtained on tests like the *Wepman Test of Auditory Discrimination* and the word discrimination subtest of the *Stanford Diagnostic Reading Test*, Primary I. Some items on both of these tests involve phonological features that are sensitive to interference from the Newfoundland dialect, a fact which should be considered when these tests are used as part of diagnostic evaluations of children who speak the local dialect.

Auditory Discrimination and Nonstandard Dialect

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References

- Cooper, F. S. How is language conveyed by speech? In J. F. Kavanagh & I. G. Mattingly (Eds.), *Language by eye and by ear*. Lawrence, Mass.: MIT Press, 1972, 25-45.
- Dykstra, R. Auditory discrimination abilities and beginning reading achievement. *Reading Research Quarterly*, 1966, 1 (3), 5-34.
- Gottesman, R. L. Auditory discrimination ability in Negro dialect-speaking children. *Journal of Learning Disabilities*, 1972, 5, 94-101.
- Hall, V. C., & Turner, R. R. The validity of the different language explanation for poor scholastic performance by black students. *Review of Educational Research*, 1974, 44 (1), 69-81.
- Hasan, R. Code, register and social dialect. In B. Bernstein (Ed.), *Class, codes and control, Volume 2*. London: Routledge & Kegan Paul, 1973, 253-292.
- Hunt, B. C. Black dialect and third and fourth graders' performance on the Gray Oral Reading Test. *Reading Research Quarterly*, 1974-75, 10 (1), 103-123.
- Hutchinson, J. O'S. Reading tests and nonstandard language. *Reading Teacher*, 1972, 25 (February), 430-437.
- Johnson, D. K. An investigation of the oral language and oral reading of black first grade children. Unpublished doctoral dissertation, The Ohio State University, 1970.
- Karlsen, B. Test prejudice: A reply. *Reading Teacher*, 1972, 26 (October), 73-75.
- Karlsen, B., & Blocker, M. Black children and final consonant blends. *Reading Teacher*, 1974, 27 (February), 462-463.
- Labov, W. *Language in the inner city*. Philadelphia: University of Pennsylvania Press, 1972.
- Lado, R. *Language testing*. New York: McGraw-Hill Book Company, 1961.
- Melmed, P. J. Black English phonology: The question of reading interference. Monographs of the Language—Behavior Research Laboratory, University of California, Berkeley, 1970.
- Noseworthy, R. G. A dialect survey of Grand Bank, Newfoundland. Unpublished Master's thesis, Memorial University of Newfoundland, 1971.
- Paddock, H. J. A dialect survey of Carbonear, Newfoundland. Unpublished Master's thesis, Memorial University of Newfoundland, 1966.
- Simons, H. D., & Johnson, K. R. Black English syntax and reading interference. *Research in the Teaching of English*, 1974, Fall, 339-358.
- Walker, L. Newfoundland dialect interference in oral reading. *Journal of Reading Behavior*, 1975, 7 (Spring), 61-78.
- Wiggins, A. V. A study of dialect differences in the speech of first-grade Negro children in the inner-city schools of Cleveland, Ohio. Unpublished doctoral dissertation, Indiana University, 1970.

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Inquiry Training and Elementary Language Skill Development

Treatment and control groups consisting of 135 grade five students were used to examine the influence of inquiry training upon reading and listening skill development. The writers conclude that in order to be of value, inquiry training needs to be both long-term and specific to the language mode. (Ms. Briggs is Vice-Principal, Jarvis Elementary School in Delta, B.C. and Dr. Evanechko is Associate Professor of Education, at the University of Victoria.)

Although most elementary school children understand the concepts of question and answer and are skilled in their use of language, they seldom ask, in school, thought-provoking questions requiring the higher-order cognitive behaviours of organization, inference, evaluation, or appreciation. Blank and Covington (1965) suggested that this deficiency might be due in part to a lack of question-asking practice or training. Since Suchman (1962) had found that training children to develop specific questioning behaviours resulted in their asking more questions than did children not trained in these behaviours and since, at the time of treatment, there was no acceptable measure of the quality of the thought content of the questions asked, the present study did not attempt to determine whether or not the children's ability to ask questions increased or improved as a result of the treatment. It was, instead, an attempt to evaluate the effect of inquiry training on listening and reading skill development by providing students with experiences which encouraged question-asking in a variety of language contexts, and by measuring their achievement before and after training.

Theoretical Assumptions and Postulates

The theoretical framework for this study postulated that the ability to use language for inquiry purposes was contingent upon the perception of

unusual stimuli and upon the arousal and consequent reduction of conceptual conflict resulting from that perception. The assumptions of the study included the following statements.

1. Curiosity is characteristic of elementary school children.
2. The perception of unusual stimuli may lead to inquiry behaviour.
3. Inquiry behaviour is a complex of behaviours which can be identified for instructional purposes.
4. Asking questions which lead to the discovery of ideas new to the learner is self-rewarding and self-motivating.
5. Question-asking strategies vary according to the needs of the individual and the task.

Procedures

Problem

The general purpose of this study was to evaluate the effect of inquiry training upon the reading and listening skills of grade five children. The specific skills measured were:

1. basic reading vocabulary
2. reading for information
3. reading for relationships between ideas
4. reading for interpretation of material
5. reading for appreciation of material
6. literal comprehension of material
7. use of creative and imaginative reasoning in reading
8. general reading comprehension
9. listening for literal comprehension of material
10. listening for interpretation of material
11. listening for application and evaluation of material
12. general listening comprehension

Hypothesis

Since there was a lack of corroborating research data, a general hypothesis was assumed, and was stated in the null form: As a result of inquiry training, there will be no significant differences between the reading and listening test scores of the treatment group and the control group.

Sample

The subjects consisted of six heterogeneously-grouped grade five classes from six different schools in Delta, British Columbia, 135 students in all. The classes were randomly selected from the population of heterogeneous grade five classes, and randomly assigned to one of two groups: treatment (69 students) or control (66 students). Randomization procedures were assumed to be adequate control for the following variables: intelligence, sex, socioeconomic status, academic ability, educational background, type of school, and type of organization for instruction.

Instrumentation

Reading. The *Bond-Balow-Hoyt New Developmental Reading Test*, forms A and B, intermediate level (BBH) measured the student's basic reading vocabulary and his ability to read for information, relationships,

interpretation, and appreciation. Summed scores on reading for information and relationships gave a measure of literal comprehension ability. Summed scores in interpretation and appreciation gave a measure of ability in the use of creative and imaginative reasoning in reading. Summed scores for the last four subtests gave a measure of general reading comprehension.

Listening. The *Sequential Test of Educational Progress: Listening*, forms 4A and 4B, intermediate level (STEP) gave a measure of the student's ability to comprehend, interpret, evaluate, and apply what he heard.

Design

The design of this study was ordered so as to permit measurement to be taken of the possible effects of inquiry training on reading and listening skills in a language arts context. Since one of the major aims of education is to enable each student to increase his proficiency in language reception, it was postulated that if inquiry training influenced skill development, it would be an effective teaching strategy and that pre- and post-scores of subjects would provide an estimate of the efficacy of this training over a five-week period.

Accordingly, the research design was a pre-test, post-test, retention-test design. Pre-tests were administered in February, post-tests in April, and retention tests in June. Every attempt was made to maintain identical testing conditions during the testing sessions in order to assure equivalence.

The treatment consisted of 25 forty-minute lessons on questioning techniques prepared by the investigator. The three classroom teachers in the treatment group administered one lesson per day. All lessons were completed during March and early April. The students in the control group continued with their regular programme. No additional time was devoted to language arts during the experimental programme, the treatment procedures being presented in lieu of the conventional language development activities.

Organization of the Inquiry Unit

Unit Outline. A unit outline was provided for the teachers. It included a statement of the major principles, the questioning strategies to be studied, and the activities, approach, evaluation, and extent of the unit. General instructions, lesson sequences, and testing schedules were also included. A summary of this outline follows.

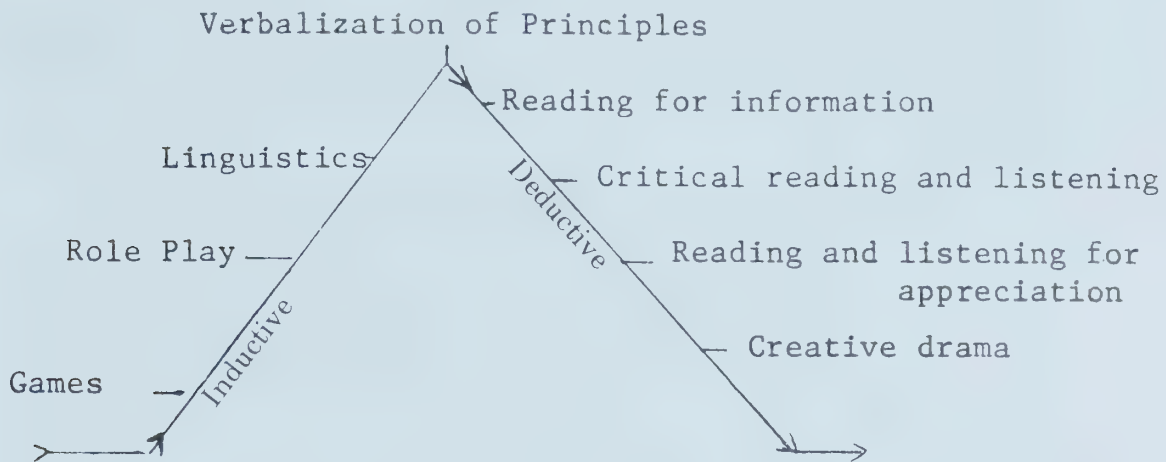
Unit Outline

A. This unit was based on these principles:

1. Each learner should develop personal inquiry strategies; i.e. he may seek information from people, from printed material, or from non-print material.
2. Each learner should realize that the answer he gets depends on the question he asks; i.e. does he want facts, instructions or opinion?
3. He should realize that strategies of inquiry may be productive of a variety of answers, not any of which may be absolutely correct.

4. He should also realize that not all questions will be answered immediately.

B. The model for this unit was an inductive-deductive one.



C. Selected inquiry strategies were presented in sequence. Each learner had the opportunity to develop and practise these strategies. They include:

1. the formulation of yes/no questions directed towards the teacher or another child,
2. the formulation of relevant information-seeking questions in a variety of situations directed towards the teacher, another child, or the self,
3. the study of the SQ3R strategy for use when reading factual prose,
4. the development of the ability to listen with an open but skeptical mind, and
5. the study of the evaluative and appreciative uses of questioning when listening to or reading imaginative prose or poetry.

D. Teaching-learning activities included:

1. guessing games involving concrete objects, sound effects, role play and creative dramatics,
2. a scientific inquiry, as linguists, investigating a specific lexicon,
3. a critical examination of factual materials, and
4. an evaluative and appreciative examination of imaginative prose and poetry.

E. The approach used was largely oral and informal. Grouping was flexible.

F. Evaluation by standardized test was for the purpose of ascertaining the effect of this unit on reading and listening skill development, and was for the information of the teacher concerned and the investigator, not for the student. No grades or marks were to be given to the student. The evaluation of individual question-asking ability was done immediately the questions were asked, orally, informally and positively. Criteria for the evaluation of the quality of students' questions were taken from the Barrett-Clymer Taxonomy (1968): comprehension, reorganization, inference, evaluation, appreciation.

1. Comprehension focussed on explicitly stated ideas and information. Questions at this level seek the recognition or recall of facts and events.

Example: Who ate the most porridge?

2. Reorganization required the analysis, synthesis, and organization of explicitly stated ideas and information. Questions at this level involve the skills of classifying, outlining, summarizing and synthesising.

Example: What important events happened in the story?

3. Inference required that the individual use his own experiences and intuitions to consider explicitly stated ideas and information when theorizing or hypothesizing to solve a problem. Questions at this level may be the result of convergent and/or divergent thinking.

Example: If the man had not run away from the police, what might have happened to him?

4. Evaluation required judgment. Questions at this level involve comparison of ideas, accuracy of information, and differentiation between fact and opinion and between reality and fantasy.

Example: Have I all the information I need to build the model?

5. Appreciation required an intellectual and emotional interaction between the student and the material he is exploring. Questions at this level identify the student with a character, a point-of-view, or a cause.

Example: If I am to play that role, how should I behave?

Lesson format and sequence.

a) Notes provided essential background material, definitions, examples, and directions. b) Performance objectives stated desirable observable outcomes. c) Required materials were listed. d) Skills needed to participate in the activities and to realize the objectives were listed. e) Detailed instructions provided guidance for implementing open-ended, divergent class activities. f) The method for evaluating attainment of the objectives was described.

Lesson sequence was determined on the basis of five generalizations which state that the growth of competence in language, and consequently in question-asking, proceeds from oral to written, fluent to controlled, specific to general to applied, concrete to abstract, simple to complex.

To ensure that the treatment was followed as designed, the investigator visited each teacher three times during the 25-day treatment period. Discussions during these visits centered on the progress of the lessons, the problems encountered, and the observations made by the teachers. No insurmountable difficulties were noted. To maintain equivalence between the control and treatment groups, the investigator also visited the control classes three times.

A summary of the treatment unit follows.

1. comprehension 2. reorganization 3. inference 4. evaluation
5. appreciation

Lesson Numbers	Title of Lessons	Major Objectives	Sample questions asked by students (Taxonomy level of questions)
1-3	Yes-No Games	By playing guessing games, each student attempts to develop an effective strategy for identifying an object or person.	Is it made of wood? (1) Is it used as decoration? (2,3,4)
4-9	The Speech Community	By gathering, compiling and evaluating data on speech patterns unique to neighbouring children aged twelve years and younger, each student practises, at a simplified level, some of the skills used by a linguist examining the lexicon of a given speech community	What do you call "spaghetti"? (1) If you're really happy about something, what do you say. (1) How will I organize this information? (2)
10-11	Consideration of Basic Question-asking Principles	By using and identifying different question-asking strategies used by himself and others, each student considers the basic principles of question-asking.	What does she want to know? (1) Did the people you asked tell you what you wanted to know? (4,5)
12-13	The SQ3R approach to Reading for Information	By using Survey-Question-Read-Review-Revise (SQ3R) techniques, each student practises asking information-seeking questions about factual material.	Who is in the picture? (1) Why was he killed? (3)
14-15	Critical Reading and Listening	After having read and listened to two dissimilar accounts of the same incident each child practises asking questions which require him: 1) to compare and contrast information and 2) to probe for completeness, authenticity, and bias of information	Why are these two stories about the same thing different? (4) Which one is right? (4) How can we find out for sure which is right? (4,5)
16-19	Appreciation of Theme and Archetype in Literature	After having read given selections of prose and poetry, each student interacts with the material by asking questions demonstrating self-involvement.	If I saw a machine creature, how would I describe it? (5)
20-25	Creative Drama	By participating in the dramatization of a myth requiring the creation of dialogue and action appropriate to the characters and events given, each student practises self-involvement with a character, cause, or point-of-view which is not his own.	How can I act losing my head? (5) How did you feel when you ran away from the stranger? (5)

Analysis and Results

It should be reiterated that the treatment given was evaluated according to its effect on reading and listening skill development. There was, therefore, no attempt to measure objectively the children's ability to ask questions; however, the teachers' subjective comments, both oral and written, indicated that they had noted increased questioning behaviour in their classes.

Three analyses were conducted: an analysis of variance, an analysis of covariance, and correlational analysis.

Analysis of Covariance

Since the one-way analysis of variance revealed initial significant differences favouring the treatment group in pre-test achievement, and since a slight but not significant difference also favouring the treatment group was observed for socioeconomic status, analysis of covariance using pre-test achievement and socioeconomic status as covariates was applied to the data to adjust the means. The results of this analysis are shown in Table 1.

TABLE 1
ANALYSES OF COVARIANCE OF THE EFFECTS OF INQUIRY TRAINING
UPON READING AND LISTENING SKILLS: TREATMENT (N=69) AND
CONTROL (N=66) GROUPS (df=1/132)

	Pretest/SES as Covariates Posttest as Criterion				Pretest/SES as Covariates Retention Test as Criterion			
	Adjusted Means				Adjusted Means			
	Treatment	Control	F	P	Treatment	Control	F	P
<u>Reading</u>								
1. Vocabulary	22.15	24.03	3.41	.07*	29.38	32.39	5.43	.02**
2. Information	14.66	15.10	.28	.60	14.34	13.10	1.64	.20
3. Relationships	10.64	9.94	.88	.35	12.25	12.76	.44	.51
4. Interpretation	9.04	10.26	2.96	.09*	10.43	11.30	1.03	.30
5. Appreciation	10.99	12.32	2.61	.11	13.08	14.02	.85	.39
6. Literal								
Comprehension	25.21	25.13	.01	.93	26.44	26.00	.11	.74
7. Creative								
Reasoning	19.89	22.72	5.74	.02**	23.28	25.45	2.30	.13
8. General								
Comprehension	44.84	48.12	3.74	.06*	49.38	51.80	1.16	.28
<u>Listening</u>								
9. Literal								
Comprehension	21.60	20.76	2.36	.13	25.26	24.11	4.12	.04**
10. Interpretation	26.42	26.55	.04	.83	22.29	21.48	2.09	.15
11. Evaluation and								
Application	11.48	11.52	.01	.92	13.14	12.76	.80	.37
12. General								
Comprehension	56.67	56.41	.06	.81	60.40	58.61	2.59	.11

* $p \leq .10$

** $p \leq .05$

Treatment Group. Significant differences in favour of the treatment group were found in the retention test for literal comprehension in listening ($p \leq .05$). Inquiry training was largely oral so it seems logical that it would affect the least complex listening skill first. Listening and reading are considered to be parallel language reception skills; however, listening skill development is considered to precede reading skill development. At the grade five level, most children learn more through listening than through reading.

Control Group. Significant differences ($p \leq .05$) favouring the control group were found in post-test scores in the use of creative reasoning in reading and in retention test basic reading vocabulary scores.

Examination of Table 1 reveals that the control group showed continuing improvement in basic vocabulary over the treatment group.

However, comparable improvement was not maintained for any of the comprehension skills. Although results consistently favoured the control group, the degree of difference decreased in the section on the use of creative and imaginative reasoning in reading. This test examined each child's ability to think about the material he had read, visualize the setting, respond to the characters, and sense implications. The score consisted of the summed scores on the sections on interpretation and appreciation, neither of which showed significant differences on the retention test, although both showed trends favouring the control group on the post-test. Improved achievement in the skills of interpretation and appreciation required increased ability to (a) infer, conclude, predict, and evaluate reading material; (b) become more able to think critically and attend to detail; and (c) make creative and imaginative responses to reading materials through the development of sensory impressions. These skills may well have been specifically taught. The teachers were given the pre-test results in March, and they indicated that they planned to use them for diagnosis and remediation of reading weakness. The treatment teachers may not have done so, since their pre-test results revealed no specific weaknesses in comparison with the control group. It is possible also that time of testing affected the results. During the study, pre-tests were administered at mid-term shortly before the parent-teacher conferences; post-tests were given in April just before the Easter vacation and the retention tests were completed in June just before the final reporting period; thus, the children's academic performance may have been adversely influenced by the disruptive effects of changing routines.

Conclusions

If inquiry is a mode of behaviour which can be strengthened through the use of specific strategies, then it should be applicable to many areas. First, though, it would appear that inquiry needs to be studied and practised over a long period of time. Short-term training in different skills appears to limit rather than encourage skill development, especially in reading; this conclusion may explain the superior performance of the control group in some measures. Inquiry skills appears also to be directly related to a particular mode of communication: listening or reading. In this study the observed increase by the treatment group in listening achievement was possibly due to the oral nature of the learning activities. It would seem, therefore, that increased reading achievement might result from written inquiry activities. The real test of inquiry training, however, is not whether the child can inquire, but whether he does. Since he gains most of his knowledge of school subjects through language, it is possible that the questioning skill gained in listening and reading in one subject area would be used in another.

The act of inquiry itself appeared of value in motivation for learning. Teachers participating in this study reported that during the training period, the children demonstrated increased critical awareness, incidental skill learning, and an improved attitude towards language arts. These subjective observations tend to reinforce the assumption that inquiry is a highly motivating force for self-directed learning.

References

- Barrett, T. C., & Clymer, T. The Barrett taxonomy: Cognitive and affective dimensions of reading comprehension. In H. M. Robinson (Ed.), *Innovation and change in reading instruction: The sixty-seventh yearbook of the National Society for the Study of Education, Part 2*. Chicago: University of Chicago Press, 1968.
- Blank, S. S., & Covington, M. Inducing children to ask questions in solving problems. *The Journal of Educational Research*, 1965, 59, 21-27.
- Bond, G., Balow, J. H., & Hoyt, C. J. *New developmental reading tests: Forms A and B (Intermediate)*. Chicago: Lyons & Carnahan, 1968.
- Garrett, H. E. *Elementary statistics*. (2nd ed.) New York: David McKay, 1962.
- Sequential Tests of Education Progress. *Listening*. Berkeley, California: Author, 1967.
- Suchman, J. R. *The child and the inquiry process*. A paper presented at the meeting of the Eighth A.S.C.D. Curriculum Research Institute, Western Section, Anaheim, California, December, 1962.

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Authoritarian Personality and Control Ideologies of Teachers

Hypotheses concerning the relationships among authoritarianism in personality, custodialism in pupil control ideology and autocracy in family ideology of elementary school educators were developed and tested. The F-Scale, the Pupil Control Ideology (PCI) Form, and the Traditional Family Ideology (TFI) Scale were personally administered by a trained researcher to virtually all the teachers and to a sample of principals in thirty-five elementary schools. For both principals and teachers, the hypotheses were confirmed. The evidence suggested that custodial pupil control ideology as well as autocratic family ideology are underlying facets of the authoritarian personality. It seems likely, however, that control ideologies of educators are a function of both personality and social system factors. (Dr. Hoy is a Professor of Education in the Department of Educational Administration and Supervision; Dr. Nachtsheim is a teacher in the South Brunswick Public Schools.)

This inquiry concerns the ideologies of elementary school personnel regarding control of students as it relates to authoritarianism in personality. It builds upon an earlier series of investigations evolving from research on pupil control begun at the Pennsylvania State University (Willower, 1965; Willower & Jones, 1963; Willower, Eidell & Hoy, 1967). The initial theoretical framework postulated that both role and personality factors would influence the pupil control ideology of public school professional personnel. There is a large body of research which supports the impact of role factors on pupil control ideology (Hoy, 1967, 1968, 1969; Willower, Eidell & Hoy, 1967; Willower, Hoy & Eidell, 1967), but there has been much less systematic study of pupil control ideology as it relates to basic aspects of personality.

The pupil control ideology of educators has been conceptualized along a continuum ranging from "custodialism" at one extreme to "humanism" at

the other (Willower, Eidell & Hoy, 1967). A custodial pupil control ideology emphasizes maintenance of order. Students are perceived as irresponsible and undisciplined persons who must be closely controlled through punitive sanctions. Misbehavior is viewed in moralistic terms; pessimism and watchful mistrust characterize the custodial viewpoint. The contrasting humanistic pupil control ideology stresses an accepting, understanding, trustful view of students. Teachers are confident in the ability of students to learn to act upon their own volition and to accept responsibility for their actions.¹ The concepts of custodialism and humanism have provided a useful way to study these diverse modes of thought that guide individual adaptation as well as institutional policy in public schools.

The initial study on pupil control ideology (Willower, Eidell & Hoy, 1967) showed that closed-minded educators were significantly more custodial in pupil control ideology than open-minded educators. However, a subsequent study of a broad set of personality factors and pupil control ideology yielded negligible results; none of Stern's (1970, p.7) twelve personality factors of the Activity Index was strongly related to pupil control ideology. Leppert and Hoy (1972) suggest that, in spite of these findings, pupil control ideology is probably bound with deeper-lying personality characteristics, such as authoritarianism, which seem more relevant in ideology formulation than the broad measures of personality tapped by instruments such as Stern's Activities Index or Edwards' Personal Preference Schedule.

Rationale and Hypotheses

Custodialism is strongly autocratic in its conception of the school and in its orientation that students are an inferior and threatening group entitled to few of the rights and privileges of adults. Humanism, on the other hand, seeks a more democratic school structure and regards students as persons to be understood and guided rather than as a group to be punished or condemned. In addition, there is substantial evidence that autocratic viewpoints tend to exist within authoritarian personality structures (Adorno et al., 1950; Dicks, 1950; Fromm, 1948; Gilbert & Levinson, 1956).

Gilbert and Levinson (1956) also point out that a custodial ideology has important psychic functions for authoritarian personality types. The idea that student misbehavior is simply irrational and not understandable has great value in reducing inner strain and maintaining self-esteem for educators who have difficulty in taking an intrareceptive, psychological approach. Furthermore, for the person who has a great defensive need to displace and project aggressive desires from authority figures to those whose behavior can be regarded as immoral, custodial ideology has special equilibrium-maintaining value through its legitimation of punitive, suppressive measures.

These considerations led to the predictions that custodialism in pupil control ideology would be directly related to authoritarianism in personality and to autocratic beliefs concerning parent-child relations. More specifically, the following basic hypotheses were tested in this study:

- H.1 The greater the authoritarianism of elementary school professional staff, the more custodial the pupil control ideology.

H.2 The greater the authoritarianism of elementary school professional staff, the more autocratic the family ideology.

H.3 The more custodial the pupil control ideology of elementary school professional staff, the more autocratic the family ideology.

Procedures

Instruments

The *Pupil Control Ideology Form*, a 20-item Likert-type scale, was used to measure the extent to which the pupil control ideology of educators was custodial or humanistic—the higher the score, the more custodial the ideology of the respondent. Examples of items include the following: “A few pupils are just young hoodlums and should be treated accordingly”; “It is often necessary to remind pupils that their status in schools differs from that of teachers”; “Pupils can be trusted to work together without supervision” (score reversed).

In earlier research (Willower, Eidell & Hoy, 1967) split-half reliability coefficients of the instrument in two samples were .95 and .91 with application of the Spearman-Brown formula. Validity of the measure was supported by principals’ judgments of the ideology of certain of their teachers. Teachers judged to be most custodial by their principals had significantly higher ($p < .01$ using t-test procedures) PCI scores than a like number of teachers judged to be most humanistic.

The *F-Scale*, Form 30, was used to determine the extent of authoritarianism in personality. The underlying theory of this measure is based on *The Authoritarian Personality* (Adorno et al., 1950). The *F-Scale* is a thirty-item Likert-type measure, the higher the score, the more authoritarian the personality structure of the respondent.

Split-half reliability of the scale has been reported at .86 (McGee, 1955, p.123). Further, validity of the instrument has been supported by numerous studies using such varied subjects as camp counselors, teachers, and German prisoners of war (Dicks, 1950; Eager & Smith, 1952; Levinson & Huffman, 1955).

A twelve-item short form of the *Traditional Family Ideology Scale* (hereafter called the TFI-Scale) was used to assess family ideology of educators along an autocratic-democratic continuum (Levinson & Huffman, 1955). A high score represents strong adherence to autocratic family ideology. A few examples of items include the following: “A child should never be allowed to talk back to his parents or else he will lose respect for them”; “A woman whose children are at all messy or rowdy has failed in her duties as a mother”; “It is somehow unnatural to place women in positions of authority over men.”

Split-half reliability of the instrument has been reported at .90 (Levinson & Huffman, 1955). Further, construct validity of the scale has been reported in a number of studies (Gilbert & Levinson, 1956; Levinson & Huffman, 1955).

Sample

In order to test the hypotheses of the study, data were collected from the professional staffs of thirty-five elementary schools in New Jersey. The schools selected represented a diverse sample of elementary schools; they

included schools of different sizes from communities with different socioeconomic levels, and from rural, suburban and urban districts. Data were collected from virtually all teachers at regularly scheduled faculty meetings by a trained researcher. Principals also were asked to complete the research instruments at their convenience. All responses were completely anonymous.

Results

The hypotheses guiding this investigation were tested using correlational analysis. More than four hundred teachers in the thirty-five elementary schools returned usable instruments. Unfortunately, only fifteen principals out of thirty-five completed the instruments; hence, the results concerning the principals seem somewhat more tentative, although they are essentially the same for both teachers and principals.

As predicted, authoritarianism of elementary school personnel, as measured by the F-Scale, was significantly correlated with custodialism in pupil control ideology with an $r=.52$ for teachers and $r=.84$ for principals. Further, the more custodial the pupil control ideology, the more autocratic the family ideology of the respondents was found to be ($r=.54$ and $r=.77$, respectively for teachers and principals). Finally, and as predicted, authoritarianism in personality was significantly related to autocratic family ideology ($r=.76$ and $r=.86$ respectively for teachers and principals). The results are summarized in Table 1.

TABLE 1
SUMMARY OF CORRELATIONAL DATA USED TO TEST THE HYPOTHESES

Hypothesis		N	r	p
H.1	Teacher F-Scale with PCI	406	.52	<.01
	Principal F-Scale with PCI	15	.84	<.01
H.2	Teacher F-Scale with TFI-Scale	406	.76	<.01
	Principal F-Scale with TFI-Scale	15	.86	<.01
H.3	Teacher PCI with TFI-Scale	408	.54	<.01
	Principal PCI with TFI-Scale	15	.77	<.01

It is interesting to note that the degree of association between authoritarianism in personality and custodialism in pupil control ideology was significantly greater than for principals than for teachers ($z=2.20, p<.05$); however, there were no significant differences between the correlations for principals and for teachers on the other two relationships.

Analysis of the data also indicated that male teachers were significantly more custodial in pupil control ideology than female teachers; however, the hypotheses held for both male and female teachers. The correlations were nearly the same irrespective of sex. Furthermore, the magnitude of the correlations among the variables remained essentially the same regardless of the extent to which the climate of the schools was open or closed. In other words, the organizational climate of schools as measured by Halpin's (1963) OCDQ was *not* a moderating variable for the hypotheses tested.

Summary and Conclusions

This inquiry has taken as its starting point the distinction between "custodialism" and "humanism" as contrasting ideological orientations of elementary school educators. The confirmation of the major hypotheses of the study lends support to the association between basic personality structure and ideology within individuals. The evidence suggests that custodial pupil control ideology as well as autocratic family ideology are underlying facets of the authoritarian personality. This conclusion is also supported in other studies where personality variables have been defined sharply and limited to authoritarian characteristics (Gilbert & Levinson, 1956; Helsel, 1971; Willower, Eidell & Hoy, 1967).

While both teacher and principal authoritarianism and custodialism in pupil control ideology were significantly correlated in the predicted direction, the relationship was significantly stronger for principals. Pupil control ideology consistently has been found to be related to professional role; that is, principals are more custodial than teachers; secondary teachers are more custodial than elementary teachers; and teachers are more custodial than guidance counselors (Willower, Eidell & Hoy, 1967). Although the association of personal authoritarianism and custodialism in pupil ideology may well be influenced by roles and positions within the school, the relationship between authoritarianism and autocratic family ideology did not significantly vary according to school roles. These results suggest the hypothesis that social system positions moderate such relationships only when the ideology concerned is functionally relevant to the role position and social context.

Pupil control has been found to be a salient aspect of life in schools (Willower, 1965; Willower & Jones, 1963; Willower, Eidell & Hoy, 1967). In fact, control of clients tends to be a pervasive theme in all service organizations where client participation is mandatory, on the one hand, and the organization has no choice in client selection, on the other. For example, organizations such as schools, prisons, and public mental hospitals are inevitably faced with clients who do not wish to take advantage of the services offered. One of the major forms of conflict in these service organizations is that between autocratic and democratic orientations. Increasingly, it appears that social ideologies have a psychological basis in the personalities of their adherents (Gilbert & Levinson, 1956; Helsel, 1971) as well as a basis in the role constraints of the particular social system. In brief, ideology in general and pupil control ideology in particular, seem to be a function of *both* personality and social system factors.

¹ For a complete description and analysis of the conceptualization of pupil control ideology as well as the development of the operational measure, see Willower, Eidell, and Hoy (1967).

References

- Adorno, T. W., Brunswick, E. F., Levinson, D. J., & Sanford, N. *The authoritarian personality*. New York: Harper, 1950.
- Dicks, H. V. Personality traits and national socialist ideology. *Human Relations*, 1950, 3, 111-154.
- Eager, J., & Smith, B. M. A note on the validity of Sanford's Authoritarian-Equalitarian Scale. *Journal of Abnormal Social Psychology*, 1952, 47, 265-267.

- Fromm, E. *Man for himself*. New York: Farrar and Rinehart, 1948.
- Gilbert, D., & Levinson, D. J. "Custodialism" and "humanism" in mental hospital structure and in staff ideology. In M. Greenblatt et al. (Eds.), *The patient and the mental hospital*. Glencoe, Illinois: The Free Press, 1956.
- Halpin, A. W., & Croft, D. B. *The organizational climate of schools*. Chicago: Midwest Administration Center, The University of Chicago, 1963.
- Helsel, R. A. Status obeisance and pupil control ideology. *Journal of Educational Administration*, 1971, 9 (May), 38-47.
- Hoy, W. K. Organization socialization: The student teacher and pupil control ideology. *Journal of Educational Research*, 1967, 61 (December), 153-155.
- Hoy, W. K. The influence of experience on beginning teachers. *The School Review*, 1968, 76 (September), 312-323.
- Hoy, W. K. Pupil control ideology and organizational socialization: A further examination of experience on the beginning teacher. *The School Review*, 1969, 77 (September), 257-265.
- Leppert, E., & Hoy, W. K. Teacher, personality and pupil control ideology. *The Journal of Experimental Education*, 1972, 40 (Spring), 57-59.
- Levinson, D. J., & Huffman, P. E. Traditional family ideology and its relation to personality. *Journal of Personality*, 1955, 23, 251-273.
- McGee, H. M. Measurement of authoritarianism and its relations to teachers' classroom behavior. *Genetic Psychological Monographs*, 1955, 52, 89-146.
- Stern, G. *People in context*. New York: John Wiley and Sons, 1970.
- Willower, D. J. Hypotheses on the school as a social system. *Educational Administration Quarterly*, 1965, 1 (Fall), 40-51.
- Willower, D. J., & Jones, R. G. When pupil control becomes an institutional theme. *Phi Delta Kappan*, 1963, 45 (November), 107-109.
- Willower, D. J., Eidell, T. L., & Hoy, W. K. *The school and pupil control ideology*. University Park, Pennsylvania: Penn State Press, 1967.
- Willower, D. J., Hoy, W. K., & Eidell, T. L. The counselor and the school as a social organization. *Personnel and Guidance Journal*, 1967, 46, 228-234.

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Dogmatism and Deference: The Relationship Between Bureaucratic Orientation and Personality Type

This study examined the relationship between dogmatism in beginning teachers and deference to bureaucratic norms of the school. Is there a difference in bureaucratic orientation of teachers between open and closed minded teachers? The results of this research suggest that closed minded teachers are significantly more bureaucratically-oriented than open-minded teachers. Moreover, the school seems to socialize both open and closed minded teachers towards the bureaucratic norms and beginning teachers, irrespective of level of dogmatism, tend to become more deferent to these norms. (Dr. Kuhlman is Associate Professor of Education at Messiah College, Grantham, Pennsylvania.)

Attention has recently been focused upon the professional teacher operating within the school which is constantly and rapidly being transformed into a more highly bureaucratically-structured organization. Harper (1965) has applied the explicit criteria of Weber's "pure-type" bureaucracy (specialization, hierarchy of authority, impersonality and a system of rules and regulations) to the school and has concluded that the school organization does indeed manifest the essential characteristics of bureaucracy.

Lortie (1969) is satisfied that the authority structure of the public schools meets the minimal criteria of bureaucracy and Corwin (1965) as well as Anderson (1968) share the conviction that schools conform to the bureaucratic model.

Studies have tended to show that personality is an important variable in determining attitudes toward and adjustment to organizations (Presthus, 1962; Gordon, 1970; Kohn, 1971). Presthus (1962) contends that the bureaucratic situation tends to foster an adaptive personality type and this personality type tends to resemble Adorno's (1950) "authoritarian personality" and Rokeach's (1960) "dogmatic personality." Iannacone and

Button (1964) contend that an individual's response to the demands of a bureaucratically structured organization may be a function of personality.

Merton (1957) has suggested that the investigation of the relationship between personality and bureaucracy could produce worthwhile results. He further indicated in his classic analysis of the dysfunctions of bureaucracy that the organizational member undergoes a transformation as a result of his prolonged contact with the bureaucratic structure of the organization and this contact tends to produce undesirable consequences for behavior. Anderson (1967) concurs and states that bureaucracies "exercise a compelling but little . . . understood influence on the personality of the professional" (p. 135).

There tends to be general agreement concerning the nature of the impact of the organization on personality and from the analyses of studies related to this impact, there has emerged a prototypic "organization man" (Whyte, 1956). The characterization of the organizational man portrays a person who feels comfortable amid the bureaucratic structure and derives great satisfaction from his identification with the organization.

Definitions of personality are in abundant supply. Allport (1937), in an exhaustive survey of the literature, identified almost fifty such definitions. It seemed appropriate to identify a frame of reference for this study in which personality could be viewed and especially as it had reference to the individual's participation in bureaucratically structured organizations. As Hall and Lindzey (1957) have indicated, "It is impossible to define personality without coming to agreement concerning the theoretical frame of reference within which personality will be viewed" (p. 10). In this study, the concept of *Dogmatism* (Rokeach, 1960) was employed to determine the relationship between personality and bureaucracy.

Presthus (1962) who has undertaken an extensive theoretical treatment of the interaction between personality and organizational involvement adopted Sullivan's (1953) frame of reference which conceives of personality as the product of social interaction and that which emerges as distinct personality has resulted from the socialization process. Presthus contends that the "upward mobile" is uniquely suited to function within the organization because his personality is compatible with the demands the organization makes and the rewards it offers. Different patterns of learning result in different modes of perception and modes of perception are determined by the value system or needs disposition which have resulted from the socialization process. Accordingly, the perceptions an individual has of the organization and his responses to its demands (i.e., his orientations) will be conditioned by his needs disposition. Therefore, organizational accommodation and particularly positive commitment to the organization may be viewed as a function of personality.

The characteristic personality pattern of the upward mobile and his "process of organizing reality" reveals great similarities to the "authoritarian personality" as defined by Adorno (1950) and measured by his F-Scale.

Rokeach (1960) formulated a conceptual framework which examined the structure of belief systems rather than content of belief systems. Correspondingly, Rokeach developed his measure of *Dogmatism*. It consists of

“openness” or “closedness” of the structure of belief systems. Closed-mindedness would be synonymous with dogmatism.

Rationale and Hypotheses

The basic characteristic which differentiates between open and closed minded individuals, Rokeach (1960) maintains, is the extent to which reaction to decisions is based upon relevant, intelligent and appropriate factors independent of the predilections of the individual. Open minded individuals will “receive, evaluate and act upon relevant information received from the outside on its intrinsic merits unencumbered by irrelevant factors in the situation arising from within the person or from the outside” (Rokeach, 1960, p. 57). Deference to hierarchical authority within an organization, irrespective of the relevancy of the information or its intrinsic merits is a conspicuous display of closed mindedness. The bureaucratic man might manifest behavior which would be consistent with the closed minded system.

Teachers can be classified as open or closed minded using Rokeach’s conceptual framework. Closed minded teachers would tend to hold to a belief system of authority where authority is absolute and consequently would more readily identify with hierarchical authority and bureaucratic norms than would open minded teachers who would evaluate people and situations using a more relativistic criterion for assessment.

Beginning teachers who have had limited contact with the socializing forces within the schools provide a good sample of the teacher population with which to test this assumption. Therefore the following hypothesis was formulated:

- H₁ Closed minded beginning teachers will have a significantly greater bureaucratic orientation than will open minded teachers.

Bureaucratic orientation is dependent upon contact with the organization; that is, the degree to which an individual manifests a bureaucratic orientation will be determined to a great extent by his contact and interaction with the organization. Personality types with a predisposition toward the bureaucratic norms of the organization who do not encounter organizations directly will tend not to manifest that orientation to the same extent as individuals who have had direct contact with the organization. Examination of the effects of socialization of beginning teachers classified as open and closed minded to the bureaucratic norms of the school was guided by the following hypotheses:

- H₂ Closed minded beginning teachers will have a significantly greater bureaucratic orientation after the first year of teaching.
H₃ Closed minded prospective teachers who do not teach after graduation will not have a significantly greater bureaucratic orientation.

Procedures

Instruments

The Bureaucratic Orientation Scale (BOS) and the *Dogmatism Scale* were the operational measures used to test the hypotheses.

The Bureaucratic Orientation Scale was refined from a factor analysis

of the forty-five Likert items which comprised Corwin's (1966) Professional and Employee Orientation Scales. The BOS consists of fifteen Likert items which measure five factors or aspects of bureaucratic orientation—Organizational control, Subordination-standardization, Rule orientation, Community orientation and Organizational loyalty. Examples of BOS items include: "Personnel who openly criticize the administration should be encouraged to go elsewhere (Organizational control); "Teachers of the same subject throughout the system should follow the same kind of lesson plans" (Subordination-standardization); "The school should have a manual of rules and regulations which are actually followed" (Rule orientation); "Teachers should take into account the opinion of their community in guiding what they say in class and in their choice of teaching materials" (Community orientation); "A good teacher should put the interests of his school above everything else" (Organization loyalty). The total BOS score provided an overall index of bureaucratic orientation. Split-half reliability for the entire scale was 0.83.

The *Dogmatism Scale* was constructed to assess an aspect of personality. It is a 40-item measure of open and closed mindedness. The scale which purports to measure the structure of belief systems rather than the content of belief systems is a further development of the conceptual base underlying the *California F-Scale* development by Adorno, Frenkl-Brunswick, Levinson and Sanford (1950). Respondents indicate their agreement or disagreement with forty statements by using numerical designation which range from "I agree very much = +3" to "I disagree very much = -3."

A short form of the *Dogmatism Scale* was utilized for this study. Troidahl and Powell (1965) have reduced the original 40-item Form E to twenty items to facilitate data gathering in field studies. They performed predictability studies to determine the results which would have been obtained by using the 40-item instrument. A cross-validation study of the 20-item measure and the original 40-item measure produced a correlation of 0.94 between the two. The split-half reliability for the short form is 0.79. Troidahl and Powell (1965) concluded on the basis of additional studies and cross-validation that the 20-item scale "could be used without reluctance" (p. 214).

Subjects

The Scales were administered to a sample of prospective elementary and secondary school teachers from four New Jersey colleges in the spring of the year at the completion of their undergraduate teacher-preparation programs (N=322). The scales were also mailed to the home addresses of these graduates approximately one year later near the completion of the first year of teaching experience. Obviously, not all respondents had been involved in teaching during the year. Two hundred fifty-four usable responses were returned (78%) and of these, 165 had been involved in teaching and 89 had been involved in non-teaching activities during the year.

Results

Dogmatism scores were divided at the median and the upper half scores were subsumed under closed mindedness and the lower half scores were

subsumed under open mindedness. First, analysis of variance was computed for the open and closed minded groups of the total sample of prospective teachers since these data were available. The analysis yielded an *F* ratio of 25.42 which is significant beyond the .001 level. The means (46.65 for the closed minded group and 51.20 for the open minded group) were in the predicted direction. Secondly, analysis of variance was computed for closed minded beginning teachers (N=85) and open minded beginning teachers (N=80) and the obtained *F* ratio was 4.61 which is significant at the .05 level. The means (47.98 for closed minded teachers and 50.55 for open minded beginning teachers) were in the predicted direction and the hypothesis was affirmed.

In order to test the additional hypotheses, differences between before and after scores on the bureaucratic orientations scale were analyzed by use of a paired t-test for the differences of means for correlated samples.

The mean scores for closed minded beginning teachers before and after the first year of teaching were 50.88 and 47.98 respectively and the obtained t-value was 4.141 which is significant at the .001 level. Hypothesis 2 was therefore supported. Closed minded beginning teachers did become significantly more bureaucratically-oriented during their first year of teaching.

TABLE 1
CLOSED MINDED BEGINNING TEACHERS AND CHANGE IN
BUREAUCRATIC ORIENTATION

Number	Pre Mean	Post Mean	Mean Difference	Standard Deviation of Mean Difference	Standard Error of Mean Difference
85	50.88	47.98	2.90	6.46	0.70

$t = 4.14, df = 84, p < .001$

Prospective closed minded teachers who did not teach experienced no significant change in their bureaucratic orientation one year after graduation from college. The t-value of 0.75 was not significant, however, the direction of the mean difference change was toward greater bureaucratic orientation (47.31 pre-mean and 46.52 post mean).

TABLE 2
CLOSED MINDED PROSPECTIVE TEACHERS AND CHANGE IN
BUREAUCRATIC ORIENTATION

Number	Pre Mean	Post Mean	Mean Difference	Standard Deviation of Mean Difference	Standard Error of Mean Difference
34	47.31	46.52	0.79	6.18	1.06

$t = 0.75, df = 33, N.S.$

Although not included specifically in the hypotheses of this study, an analysis of the changes in bureaucratic orientation for open minded beginning teachers was performed in an attempt to determine if the socializing influences of the school's bureaucracy extended to teachers who were classified as less dogmatic. The analysis yielded a t-value of 2.25 (pre-mean = 52.19 and post mean = 50.55) which was significant, $p < .05$. Apparently, open minded teachers experienced an increased bureaucratic orientation similar to that experienced by closed minded teachers.

TABLE 3
OPEN MINDED BEGINNING TEACHERS AND CHANGE IN
BUREAUCRATIC ORIENTATION

Number	Pre Mean	Post Mean	Mean Difference	Standard Deviation of Mean Difference	Standard Error Of Mean Difference
80	52.19	50.55	1.64	6.15	0.73

$t = 2.25, df = 79, p < .05$

Discussion

The present research focused upon the relationship between personality types and deference to bureaucratic norms. Specifically, the research design involved the changes in bureaucratic orientations of beginning closed and open minded teachers during their initial encounter with the school in a professional role as well as the differences between their orientations to the school's bureaucracy. Does the school exercise an influence similar to other bureaucratically-structured organizations upon its participants as Presthus (1962) suggest it may? With reference to personality types as defined by Rokeach (1960), and the impact of the organization upon them, both closed and open minded teachers seem to be sensitive to the bureaucratic pressures. Regardless of personality type, both open and closed minded teachers became significantly more bureaucratically-oriented. Bridges' (1965) study of open and closed minded school principals and conformity to role prescriptions suggest a similar occurrence.

Interestingly, closed minded prospective teachers who did not teach did not experience a significant change in bureaucratic orientation which would tend to support the finding that the school does indeed "exercise a compelling . . . influence on the personality of the professional . . ." (Anderson, 1967, p. 135). Contact with the school organization tends to enhance bureaucratic orientation for both open and closed minded teachers whereas lack of involvement in the school resulted in no significant change in orientation.

Closed minded teachers, as hypothesized, were more bureaucratically-oriented than open minded teachers. The orientations of open and closed minded prospective teachers prior to the encounter with school were more disparate and the mean scores (51.20 and 46.65 respectively) reflect this. The difference in bureaucratic orientation for the two groups after the year

of teaching, although significant, was not as great as that which is reflected in the respective mean scores (50.55 and 47.98). Such findings tend to support the contention that the more dogmatic teachers are more amenable to the socializing bureaucratic norms of the school organization and that their value systems and need dispositions are commensurate with the bureaucratic demands of the school. However, irrespective of personality type, the bureaucracy seems to exercise a strong influence on orientation as Presthus (1962) and Denhardt (1968) have suggested.

Summary

Generally, it may be concluded that closed minded teachers have organizational orientations reasonably consistent with bureaucratically-structured schools. The investigation of personality types utilizing the Dogmatism construct gave partial support to Presthus' contention that there is a discernible personality type which is compatible with the norms of bureaucracy.

The influence of the school in producing this increased deference to bureaucratic norms must be considered in making judgments about orientations to organizations by personality types. Contact with the organization tends to reduce the importance of personality in bringing about deference to its norms. Role socialization tends to reduce attitudinal differences among role incumbents (teachers) and personality may become less important in responses to the school's bureaucratic norms.

References

- Adorno, T. W., Frenkl-Brunswick, E., Levinson, D. J., & Sanford, R. N. *The authoritarian personality*. New York: Harper and Brothers, 1950.
- Allport, G. W. *Personality: A psychological interpretation*. New York: Holt, 1937.
- Anderson, J. G. The authority structure of the school: System of social exchange. *Educational Administration Quarterly*, 1967, 3 (Autumn), 130-148.
- Anderson, J. G. *Bureaucracy in education*. Baltimore: Johns Hopkins Press, 1968.
- Bridges, E. M. Bureaucratic role and socialization: The influence of experience on the elementary principal. *Education Administration Quarterly*, 1965, 1 (Spring), 19-28.
- Corwin, R. G. *A sociology of education*. New York: Appleton, Century Crofts, 1965.
- Corwin, R. G. Staff conflicts in the public schools. *Cooperative Research Project of the U.S. Office of Education*, Project No. 2637, Final Report, 1966.
- Denhardt, R. Bureaucratic socialization and organizational accommodation. *Administrative Science Quarterly*, 1968, 13 (December), 441-450.
- Gordon, L. V. Measurement of bureaucratic orientation. *Personal Psychology*, 1970, 23 (Spring), 1-11.
- Hall, C., & Lindzey, G. *Theories of personality*. New York: John Wiley and Sons, 1957.
- Harper, D. Growth of bureaucracy in school systems. *American Journal of Economics and Sociology*, 1965, 24 (July), 261-271.
- Iannacone, L., & Button, H. W. *Functions of Student Teaching Attitude Formation and Initiation in Elementary Student Teaching*. Cooperative Research Project of the U.S. Office in Education, Project No. 1026, 1964.
- Kohn, M. L. Bureaucratic man. *American Sociological Review*, 1971, 36 (June), 461-474.

- Lortie, D. C. The balance of control and autonomy in elementary school teaching. In A. Etzioni (Ed.), *The semi-professions and their organization*. New York: The Free Press, 1969.
- Merton, R. K. (Ed.) *Reader in bureaucracy*. Glencoe, Ill.: The Free Press, 1957.
- Presthus, R. *The organizational society*. New York: Random House, 1962.
- Rokeach, M. *The open and closed mind*. New York: Basic Books, 1960.
- Sullivan, H. S. *Interpersonal theory of psychiatry*. New York: W. W. Norton and Co., 1953.
- Troldahl, V. C., & Powell, F. A. A shortened version of the Rokeach Dogmatism Scale. *Social Forces*, 1965, 40 (December), 211-214.
- Whyte, W. H., Jr. *The organization man*. New York: Simon and Schuster, 1956.

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